



The Health of Bradford 1970

The Annual Report of the Medical Officer
of Health and Principal School Medical Officer
William Turner, M.B., Ch.B., D.P.H., LL.B.

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Senior School Medical Officer	G. WARNES, M.B., CH.B., D.P.H.
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Chief Public Health Inspector	F. H. MYERS, M.R.S.H., M.A.P.H.I.
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Superintendent District Nurse	MARGERY A. FLINT, S.R.N., S.C.M., H.V.CERT., (QUEEN'S NURSE)
Supervisor of Midwives	EVELYN R. ENTWISTLE, M.B.E., S.R.N., S.C.M., M.T.D., H.V.CERT., (QUEEN'S NURSE).
Ambulance Officer	J. CLARK, F.I.A.O.
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PREFACE

Over many years the Health Department developed its services in the environmental, preventive and supportive fields within the City. 1970 was the last year of the evolution which has occurred since the introduction of the National Health Service Act in 1948. During 1970 we were aware of the imminent consequences of the transfer of certain work to the proposed Social Services Department. We were aware of the proposed reform of local authorities, which involved not only boundary changes but also some discussion of the separation of the Health Department's environmental functions to differing levels of an Authority. We were aware of the proposed unification of the structure of the National Health Service outside the ambit of local authorities and all that might mean in terms of the dissolution of existing patterns of administration. It is not therefore surprising that in matters of internal administration the year was relatively quiet.

Nevertheless, demands, as always, were met to the best of our ability, and needed expansion took place at certain important points—for example, in the general fields of community nursing, family planning and health education. I am sure that everybody in all branches of the obstetric and infant health services in the City will be pleased that the hard work has resulted in the first substantial fall for five years in the infant mortality rate to its lowest level ever in Bradford. This has been achieved in the face of a continuing high birth rate, including a level of immigrant births which has changed only a little during the past three years. The account of the work of the various sections of the Department is to be found in the pages of the Report.

I wish to thank all members of the Staff of the Health Department for their work during the year and many other officers of the Corporation for their help. I also thank Alderman N. Walker as Chairman of the Social Services Committee and Councillor J. Foers as Convener of the Public Health Executive Group for their leadership and support, members of Committees for their direction and advice and all members of Council who have contributed in many ways to the running of the health services.

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Medical Officer and Principal
School Medical Officer.

MATERNITY SERVICES**Births**

Total births to Bradford women increased from 5,650 in 1968 to 5,803 in 1969. In 1970 there was again an increase from the previous year, although only slight. The total number of births for 1970 was 5,813. Of these, 5,738 were live births and 75 were stillbirths. The vast majority of these births occurred within the City, but 169 Bradford women were delivered outside the City and the births were transferred in for statistical purposes.

This was the second complete year of operation of the General Practitioner Unit at the Bradford Royal Infirmary, and the (Bradford) births in this Unit increased from 935 in 1969 to 1,101 in 1970. The Bradford Domiciliary Midwifery Service also dealt with 99 confinements on the General Practitioner Unit, of patients living outside the City. The total number of births on the Unit was, therefore, exactly 1,200—an average of 100 cases a month.

The number of institutional births again showed an increase from the previous year. In 1969 the percentage of hospital confinements was 86.3. In 1970 the percentage was 91.6, leaving only a very small number of patients to be delivered in their own homes. Of these, 70 were in fact booked for institutional confinement, but had their babies as “born before admission” at home.

As previously, a policy of planned early discharge from all the maternity units has been operated throughout the year, though with the increased number of hospital beds, there has been less pressure to discharge some patients who would benefit from a longer stay in hospital.

Stillbirths

In 1970, there were 75 stillbirths born to Bradford women. Although this is a slight increase from the previous year (72 in 1969) it still represents a low stillbirth rate of 12.9 per thousand total births (12.5 in 1969).

Of the 75 stillbirths during this year, 29 were mature by weight and 46 were premature. There were two domiciliary stillbirths, two in the General Practitioner Unit, one in Shipley Maternity Home and the rest in the Consultant Units.

Perinatal Mortality

There was a welcome reduction in the number of live-born babies who died during the first week of life in 1970—65 compared with 83 in 1969. The early neonatal mortality rate was 11.3 per thousand births (14.5 per thousand in 1969). With a total of 75 stillborn babies and 65 babies who died in the first week of life, the perinatal mortality rate for 1970 was 24.1 (26.8 in 1969). Of the 65 babies who died in the first week of life, 35 were premature. Eight babies who died in the first week were born at home, and of these three died at home and five died after transfer to hospital.

It is also pleasing to record a reduction in the number of babies dying within the first month of life. There were 78 such deaths in 1970 compared with 92 in 1969.

The neonatal mortality rate was therefore reduced from 16.1 per thousand in 1969 to 13.6 in 1970.

Maternal Deaths

During the year there was one true maternal death and one death in association with pregnancy, giving a maternal mortality rate of 0.34 per thousand births.

The true maternal death was a patient who died very early in pregnancy from a ruptured tubal ectopic gestation. The second death was a mother who died four months after her confinement. This was an Asian patient whose cause of death was tuberculous meningitis.

Illegitimacy

In 1970 there were 653 illegitimate births, giving an illegitimacy rate of 11.2 per cent (11.4 per cent in 1969). Again the illegitimacy rate for Bradford is significantly higher than the national average.

Forty-one mothers were 16 years old or under when their babies were born (two at 14 years, 15 at 15 years and 24 at 16 years). Fourteen girls who were 16 years old or less became pregnant while still at school.

The percentage of illegitimate babies known to have been placed for adoption was very low. Although there were 653 babies born illegitimately, only 30 are known to have been adopted at the end of the year. Thirty-five babies were in the care of the Local Authority, 15 babies died and three were stillborn. This means that the vast majority (570) were cared for by their mothers, either alone or in co-habitation.

Detailed statistics of these births are given in the Appendix.

Care of the Unsupported Mother and Her Child

During 1970 a total of 81 girls were admitted to Oakwell House Mother and Baby Home. This number is exactly the same as in the previous year. The number of admissions to the Home fluctuated considerably during the year, and showed a rise in the last few months after the closure of the Holybrook House Mother and Baby Home in September. A statistical report for Oakwell House is given in the Appendix, and shows that there has been no very marked change in the age or status of girl requiring admission to the Home during the year.

Of the total of 81 girls, 69 were Bradford cases, nine were sponsored to the West Riding County Council, two by other Authorities, and one was an independent case.

Again a considerable number of mothers admitted to the Home kept their babies. This is not only a local but national trend, though it was particularly marked in 1970 when 37 of the 81 girls returned home with their babies. This tendency is producing a situation where although the

illegitimacy rates remains high, the number of babies being offered for adoption is proportionately less. The Bradford Adoption Society now again has a long waiting list of people wishing to adopt a child.

In addition to its major function as a Mother and Baby Home, Oakwell House continued to provide accommodation for babies who required separation from their mothers whilst being given B.C.G. vaccination gaining protection from tuberculosis. Seven such babies were nursed in the Home during the year.

During the year, five Bradford girls were admitted to Holybrook House (in Bradford) and nine to the St. Margaret's Roman Catholic Mother and Baby Home in Leeds.

Family Planning

During 1970 there was a considerable expansion of the Local Authority Family Planning Service; 1,114 new patients were seen in the Local Authority clinics—more than twice the number seen in the previous year. Starting in March, 1970, the Local Authority provided a family planning clinic within the post-natal clinics of Bradford's two maternity hospitals, as it is appreciated that family planning should be an integral part of maternity care and that the post-natal situation is an ideal one in which to offer family planning advice. At the St. Luke's Hospital Post-natal Clinic 353 patients were first seen and 155 at the Bradford Royal Infirmary Post-natal Clinic. After their initial visit to the hospital for this advice, patients were seen for follow-up appointments in the Edmund Street Local Authority Clinic. Because those patients seen in the Edmund Street Local Authority Clinic, as in previous years, were referred on the grounds of medical and social need, again the number of patients fitted with the intra-uterine device was high. A total of 691 patients was offered this method of contraception, 345 were given an oral contraceptive and the rest other methods of contraception.

For the satisfactory follow-up of patients who fail to keep their return appointments, we have continued to rely on the services of a trained nurse who works in the Clinic and also visits defaulting patients in their own homes. The number of domiciliary visits made during the year was 181. This again proved to be an essential part of the Service because so many of the patients attending the Clinic have many family responsibilities and are not always able to attend regularly.

In addition to the patients seen at our own clinics, 150 women were sponsored by us to the Family Planning Association's sessions held in four of the clinic premises and also in St. Luke's Maternity Hospital. The medical officers of the Family Planning Association have sponsored some of these patients and the rest have been referred by our staff to clinics near to their own homes. Our own staff and that of the Family Planning Association have continued to work together in the care of these patients.

Screening for Cancer of Cervix and Breast

In 1967 there was a big response to our invitation to women to attend for cervical smear examination. For this reason, and because the local policy

is that of a three-yearly re-call, there was a big increase in the number of patients returning for a second time during 1970. Of the total of 4,729 patients seen during the year, 2,600 were return patients and 2,129 were seen for the first time.

The total number of smears taken was 4,766 (37 patients were required to attend for more than one test). These figures represent a big increase in the total work done in this Clinic during the year, (total patients for 1969—3,406). The re-call system, making use of the Local Authority computer, has continued to work satisfactorily.

Of the 4,729 patients examined, 31 had a positive smear test and 29 had suspicious smears which were awaiting early repeat tests at the end of the year. The increased tendency for suspicious smears to be reported has again having a trichomonas infection was 149.

Of the 31 cytologically positive cases, eight underwent a hysterectomy, 14 had a cone biopsy of the cervix, two were referred for radio-therapy, two were being observed by the gynaecologist and five were still awaiting referral at the end of the year. Of these 31 positive cases during 1970, six had been previously examined in 1967 and at that time had normal smears. Ten patients with positive smears were less than 35 years old. It is not possible to estimate an accurate incidence of positive smears in view of the high number graded as suspicious and awaiting confirmation. Should all the suspicious smears prove positive, the incidence of positive smears would be 12.7 per thousand, and should the suspicious smears prove to be negative, the incidence would be 6.6 per thousand.

All the new patients attending for a cervical smear test were offered routine examination of the breast and were taught how to continue this examination for themselves.

Municipal Midwifery Service

The Service has been fully staffed throughout the year. Six midwives have attended refresher courses held under 'Rule G1' of the Central Midwives Board. Four midwives have attended a three day in-service training course at Grantley Hall (West Riding). A clinic nurse and one part-time midwife attended the training course run by the Family Planning Association. An assistant supervisor of midwives is taking the full-time course for the Midwives Teachers Diploma at the Midwife Teachers Training College. During the year one midwife retired and another returned to the hospital service; one part-time midwife returned to full-time duty and another returned to general nursing. One midwife had maternity leave. Two full-time midwives were appointed.

The General Practitioner Maternity Unit at Bradford Royal Infirmary has become increasingly integrated with the Domiciliary Service; indeed, it is an extension of home delivery. Midwives with transport are available there at all times, and use of the 'pocketfone' has lessened, as in an emergency (e.g., B.B.A., A.P.H.) relatives and doctors telephone direct to the G.P. Unit. In consequence, fewer emergency calls come to the Midwifery Office.

All expectant mothers booked for confinement with the domiciliary midwives and general practitioners, either in the G.P. Unit or at home,

attend the Health Department ante-natal clinics in the areas where they live. Expectant mothers are very appreciative of this service because they prefer to attend clinics near their homes, especially if they have children. Eighteen general practitioners attend ante-natal clinics. Midwives are very appreciative of the Health Department 'doctor service' at the ante-natal clinics. Other general practitioners see their patients at stated intervals during pregnancy, at their own surgeries.

The decrease in home confinements continues, as most mothers wish to have their babies in hospital. A twenty-four hour midwives service must be maintained for the whole City. Planned early transfer home from hospital of mothers and babies takes place daily, from St. Luke's Maternity Hospital, the Consultant Maternity Unit, Bradford Royal Infirmary, and the General Practitioner Unit, Bradford Royal Infirmary (see table below—*Early Transfer Home*). It will be seen from these statistics how necessary it is to maintain a first class domiciliary midwifery service to care for the large number of early transfer mothers and babies. Mothers are taken home by ambulance, accompanied by a domiciliary midwife.

The G. P. Unit at Bradford Royal Infirmary is the only unit in the country which is fully staffed by domiciliary midwives.

In 1970 over 100 expectant mothers from the West Riding area were booked in the G.P. Unit, and 99 mothers were delivered there.

Throughout the year staff meetings are held and in-service training continues so that midwives are kept up to date with changes in the midwifery field.

Parentcraft classes are available for all expectant mothers at Health Department clinics.

In the ante-natal period there is close co-operation between the domiciliary services (midwives and general practitioners) to care for expectant mothers booked in the Consultant Unit. For example:

Mothers who fail to attend the Hospital ante-natal clinics	...	...	(428 in 1970)
Mothers with hypertension visited twice daily until admission	...	...	(193 in 1970)
Mothers receiving iron injections for anaemia	...	...	(287 in 1970—10 visits each)

In addition, all mothers booked for hospital have at least one visit at home from a domiciliary midwife to help with home arrangements for early transfer home after confinement.

Care of Mothers in the Ante-natal Period

Attendance at ante-natal clinics	...	...	...	25,102
(Of these, 4,795 were seen by a doctor at a clinic)				
Blood samples taken	...	...	...	6,566

Post-natal Examinations	...	...	...	...	...	...	474
Visits to patients delivered at home	...	...	...	...	...	...	8,688

There were 5,813 births to Bradford women during 1970 (including 169 'transferred in'). In addition 933 babies were born in Bradford to women normally resident outside the City, and were 'transferred out'.

				'City' Births			
Domiciliary	...	...	...	Live	488		
				Still	2	Total	490
St. Luke's Hospital	...	...	...	Live	2,335		
				Still	41	Total	2,376
B.R.I. Consultant Unit	...	...		Live	1,650		
				Still	27	Total	1,677
B.R.I. G.P. Unit	...	...	...	Live	1,099		
				Still	2	Total	1,101
Transfers in (Domiciliary)	...	...		Live	—		
				Still	—	Total	—
Transfers in (Hospitals)	...	...		Live	166		
				Still	3	Total	169
				Total City Births			5,813

				'Outside City' Births			
Domiciliary	...	...	...	Live	2		
				Still	—	Total	2
St. Luke's Hospital	...	...	...	Live	320		
				Still	7	Total	327
B.R.I. Consultant Unit	...	...		Live	499		
				Still	6	Total	505
B.R.I. G.P. Unit	...	...	...	Live	99		
				Still	—	Total	99
				Total Outside City Births			933

Early Transfer Home

Of the city births, 3,668 mothers and babies were transferred home to the care of domiciliary midwives and general practitioners:

		Up to 48 hrs	3-7 days	8 days +
G.P. Unit	B.R.I.	1,078	90	89
Consultant Unit	B.R.I.	596	122	93
St. Luke's Maternity Hospital		1,096	132	205
		Total 3,668 (31,550 visits)		

Attendance at Parentcraft

No. of hospital booked patients	...	...	...	443
No. of domiciliary booked patients	...	...	...	61
				Total 504
Total Attendances 5,915				

The Domiciliary Midwifery Service is very well supported by the Home Help Service and the Health Visiting Service.

The Family Welfare Service workers continue to give help and advice to midwives about unsupported expectant mothers, and many girls have been referred by the midwives to this Service. A tribute must be paid to the great co-operation from the Ambulance Service personnel, who work so well with the midwives. The General Practitioner and Leeds Emergency Services gave good support to the domiciliary midwives.

Premature Baby Service

Because there are the three special care baby units in the City, few premature babies are nursed entirely at home. Follow-up care is less intensive, as the babies are kept in the units until their mothers are capable of caring for them. All Asian mothers receive a visit on the day they are discharged, to help them to cope with heating, clothing, etc., in this variable climate.

Number of visits to premature babies 859

Births to Commonwealth Immigrants

The following table gives numbers of children born in Bradford to Commonwealth immigrant parents in the period 1960-70:

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	TOTAL
Asian	87	117	162	195	294	466	601	805	1,040	1,155	1,194	6,116
Half-Asian	59	60	54	65	96	78	94	112	110	90	86	904
Negro	63	89	149	140	179	138	164	124	112	112	104	1,374
Half-negro	15	31	25	29	33	44	39	50	43	43	44	396
TOTAL	224	297	390	429	602	726	898	1,091	1,305	1,400	1,428	8,790

INFANT HEALTH

Health Services and Public Health Act, 1968 (Section 60)*Child Minding*

This is the last full year in which the supervision of child minding is the responsibility of the Health Department, although this function will be continued for a few months into 1971. The Nursery and Child Minders Regulation Act was amended two years ago, and after the commencement of the new Act, minders who had not been required to register under the old Act either registered or discontinued minding forthwith.

Since the Act, approximately one quarter of the new applicants for registration have either withdrawn before formalities have been completed, or after only a relatively short period of minding. It is thought that many of these realised that the financial reward for this type of work is small.

Whilst new applicants for registration as child minders were 35 per cent less in 1970 than in the previous year, the total of registered minders has increased considerably in the last few years, and reflects the considerable demand for this type of service in the City. Fees on a sliding scale charged in day nurseries have inclined some mothers to prefer day minders because their charges are generally less. Other probable factors are geographic convenience and flexibility of the hours when day minders are willing to take children. The new legislation made it easier to administer child minding and to establish standards to safeguard both the material care and the development of the children. Most minders are registered to take up to four children, though some with better facilities are able to deal with greater numbers. We have no reason to believe that un-registered child minding occurs in Bradford on the same scale that has been reported from other parts of the country, probably due to a less difficult general housing position than in those areas.

It is difficult to assess what effect this form of care has on children, and whether it is to their advantage or otherwise. Not all the arrangements are ideal, but they at least equal the circumstances in which the child would have lived if the parent had not sought employment. Such circumstances would also often have fallen short of the optimum standards. There is a wide variation in the standards of care provided by child minders, and although many of the children experience satisfactory care, not all profit from the more stimulating care usually given in a day nursery. Generally speaking the latter seems to be preferable—particularly for children in the immediate pre-school ages.

Pre-school Playgroups

At the end of 1970, there were 42 pre-school playgroups either registered or in the process of registration. These groups collectively hold 115 sessions per week, and make provision for approximately 900 children between the ages of three and five years, who attend at least one session per week. Thirty of these groups offer a free place to any child with special needs, on the recommendation of health visitors, social workers, etc.

During the year, several of the registered groups increased the number of weekly sessions. One group, located in an area with special problems, and which had closed in 1969 due to the removal of the playgroup leader, was able to re-open. A new group which caters exclusively for mentally handicapped children was registered and is operating for two sessions per week. This meets a particular need, and gives an opportunity for the children to develop both mentally and socially. In addition, it enables parents to have at least a few hours freedom from the demanding work of caring for these children.

Battered Baby Syndrome

In common with other cities, Bradford has had a number of children who have received serious physical abuse from their parents or guardians. It is impossible to define the number, partially because the distinction between 'serious' and 'non-serious' is necessarily arbitrary, and partially because the less serious forms are mainly concealed or assumed to be due to other causes. Active search for these conditions during the past 10 years has been undertaken, and those involved think that more cases have occurred in the past two or three years than previously. To some extent this increase may be due to greater awareness and better diagnosis, but they feel that there has been a great increase in the number of children abused. Cases have come to light as a result of admission to hospital of children admitted to care of the Local Authority and found to be injured on admission, and as a result of referral by health visitors and school teachers.

Management of the problem is particularly difficult because separation of the child from his parents can lead to deprivation more damaging than abuse. On the other hand repeated assessments have occurred in some cases and several children in the City are now permanently brain damaged as a result of ill-treatment. The decision, therefore, to return a battered child to the parents is particularly difficult and has to be based upon the consideration of all the circumstances in the particular case. To assess this we have endeavoured to obtain psychiatric examination of all abusing parents where this has been possible, and there has been close co-ordination between hospital and Local Authority personnel and the N.S.P.C.C.

Children of Unsupported Mothers

The number of illegitimate births in the City has been considerably above the national average for many years. It is known that there are increased risks to the health and development of these children, and of particular concern are some of the children born to young unsupported mothers. Some of these are offered for adoption and there is reason to believe that they subsequently do well. The number of children being offered for adoption has declined, and it is reasonable to assume that abortion and the increased availability of contraception for unmarried people has had a greater effect on the type of girl who would have offered her baby for adoption than on the type who wishes to keep her baby. The changed circumstances of recent years have had little effect on the unmarried girls who *wish* to become pregnant although they have no means of support. A considerable proportion of these girls are assisted by their families but some continue to lead unstable

lives, living from day to day and having few hopes for the future. They are not always receptive of assistance or advice and their children are deprived of normal care and are frequently neglected. It is a matter of considerable concern that they are not only disadvantaged in a material and nutritional sense, but also that their development and subsequent abilities are often substantially impaired.

Infant Deaths

For the past few years a monthly meeting has been held to enquire into the circumstances of all infant deaths in the City. The meetings are attended by the Principal Medical Officer in Child Health, and the medical officers or health visitors who have had connection with the deceased children. This has had the effect of focusing attention on some of the factors responsible for these deaths and has indicated the course for preventive action to avoid future tragedies.

The distribution of causes of death has been recorded in the annual reports for recent years and it remains substantially unchanged. Approximately one third have been associated with infections, and in some of these avoidable and environmental factors may have played a part. The majority of deaths have occurred in hospital and only 14 per cent at home.

Not all the deaths were sudden and unexpected with the exception of those babies who died from acute respiratory disease. In these cases the interval between the onset of symptoms and death was remarkably short, and specific preventive action would have been very difficult. Indeed, in a number of cases children who were put to bed in the evening and who were thought to be healthy, were found dead in their cots on the following morning.

Of the 137 children under the age of one who had died, 84 were males and 53 were females. The child's 'place' in the family is not recorded in all cases, but of 20 children whose death was associated with prematurity, six were first born, three were second born, nine were third born, and one was fourth born and one was ninth born.

There were 34 deaths under one year of infants of Asian immigrants. The causes were as follows:

Bronchopneumonia	...	...	...	9
Prematurity	...	...	...	3
Respiratory failure	...	...	...	10
Congenital deformities	...	...	...	2
Encephalocele	...	...	...	2
Others	.....	...	...	8

During 1970, nine per cent of the stillbirths and 12 per cent of the live births were illegitimate. It is significant that 25 per cent of the infant deaths were illegitimate babies, showing that they are at much greater risk throughout the first year of life.

Congenital Malformations of the Nervous System

In the past five years 86 children with congenital malformations of the nervous system have been born in Bradford. As in other areas the propor-

tion surviving as a result of surgical treatment has increased over the years, and these children present a number of special problems of management and education. Of the residual problems the two presenting the greatest difficulties are firstly a lack of mobility (since many of the children have a substantial loss of function in the lower limbs) and secondly, urinary complications. Children with these defects present a great challenge to the educational services as approximately 50 per cent are of reasonably normal intelligence. A proportion, however, suffer additionally from mental sub-normality and this type of defect is requiring increased attention in the special care units and training centres.

Child Welfare Clinics

During the year, 51,922 attendances were made at the 28 child welfare clinics in the City—throughout the day at main centres and during clinic sessions at branch clinics. The sale of ‘welfare’ and proprietary brand baby foods totalled £25,706.53.

Day Nurseries

Following the opening of the Lowfield Day Nursery on 30th September, 1970, the number of places available in Health Department day nurseries has risen to 340. At the end of the year there were 345 children on the register, with an average daily attendance of 243. Only 15 children were awaiting medical examinations before priority admission, compared with 46 in 1969 and 59 in 1968.

As at 31st December, 1970

Day Nursery	Places	No. of Children on Register	No. of Children awaiting Admission
Albion Road	30	34	3
Brownroyd	50	61	5
Canterbury	40	43	3
Farcliffe	70	65	—
Greaves Street	60	70	—
Lowfield	50	26*	3
Thornbury	40	45	1

**The number of children on the register is expected to rise during the early part of 1971 as more parents become aware of the existence of the Nursery.*

Health Visiting Service

During the year, the Health Visiting Service has continued to adapt to the changing needs of the community, but it has retained some of the traditional practices that are still of benefit. The care of the pre-school child remains an important part of the Health Visitor’s work, and special emphasis is now placed on the developmental assessment of all of these children. This work is in fact forming the basis of the work of the modern child welfare centre, replacing the more traditional setting which revolved around the weighing of infants. At the same time, the care of the elderly, the handicapped, school children with special health problems and persons suffering from serious and chronic illnesses are all areas of health visiting practice which are growing.

During the year, the needs of patients discharged from hospitals were highlighted by the Report of the Dan Mason Research Team, entitled 'Home from Hospital.' At the time of publication, we were discussing problems of a similar nature with the staff of a 200 bedded geriatric hospital within the City. Arrangements had already been made for a staff exchange scheme, whereby charge nurses and ward sisters from the Hospital spent a day with a health visitor, and vice versa.

During discussions which ensued, it became increasingly apparent that the conclusions of the Dan Mason Report largely coincided with those which we had drawn from our own experience. Consequently, we agreed to introduce a pilot scheme for the care and after-care follow-up of all patients discharged from the Hospital. The scheme commenced towards the end of the year, and will include approximately 200 patients. Each patient is referred to a health visitor prior to discharge, and following discharge, an analysis form is completed by the Health Visitor for each case, in an attempt to define not only the needs of the patient and his family, but also the attendant problems of communication between hospital and domiciliary staff. We have completed questionnaires from only fifty patients to date, but it seems apparent from these few that this type of service is much needed. We are hopeful that the findings of this pilot scheme will help us to establish a more realistic policy relating to care and after-care.

It was anticipated that because of the nature of the scheme, there would undoubtedly be practical 'teething troubles' during the initial stages. In consequence, a committee was established to provide an opportunity for discussion and to give guidance where necessary. The Committee meets as frequently as is necessary, and consists of two members of the Hospital. District Nursing and Health Visiting Services respectively.

The aims and objectives of the pilot scheme are:

1. To assess the needs of the patient and his family in relation to care and after-care following discharge from hospital.
2. To determine whether all or only selected patients require this type of service, and to what extent.
3. To assess the advantages, disadvantages and feasibility of direct methods of communication between individual ward sisters and health visitors.

The following is an extract from the analysis form which is completed by the health visitor, and gives examples of questions included in the survey.

1. After notification of, but prior to, the patient's discharge, did you:
 - (a) Discuss the patient with the ward sister by telephone?
 - (b) Was it necessary for you to visit the patient in hospital?
 - (c) Was it necessary for you to visit the patient's home prior to discharge?
2. Following the patient's discharge, did you advise on the following:
 - (a) Medication?
 - (b) Mobility/rehabilitation, etc.?
 - (c) General management of the patient's condition?
 - (d) Social aspects of the disease?
 - (e) Did you refer the case to another social service/agency?
 - (f) Did you refer the case to the District Nursing Service after the patient was discharged?
 - (g) Did the patient appear to benefit from the visit?
 - (h) Were the relatives under stress and in need of support?

Statistics

The following table gives comparative figures for 1969 and 1970 for some aspects of health visitors' work:

	1969	1970
1. Total number of cases visited	32,256	39,975
2. Total number of persons aged 65 and over visited	3,029	3,656
3. Total number of care and after-care cases visited	4,128	8,843
4. Number of care and after-care cases referred to health visitors by G.P. or hospital	1,156	1,756
5. Total number of first visits to tuberculous households	1,172	994
6. Total number of first visits to infectious disease households	3,670	2,517
7. Total number of first visits to immigrants	5,071	5,193
8. Number of visits paid by health visitors to G.P. surgeries for consultations	666	1,342

It is interesting to note that the total number of cases visited by health visitors in 1970 shows a marked increase on the previous year's statistics. In addition, the number of cases referred to health visitors by G.P.'s and hospitals has increased by approximately 50 per cent and could be an indication of the changing attitude of all workers towards team work.

It might appear at first sight from the above table that there has been a diminution in the incidence of tuberculosis and infectious diseases generally. Line 5 relates to first visits to tuberculous households during the year in question, and of course first visits are made each year to cases notified in previous years.

Total new notifications of tuberculosis (all forms) were in fact 311 in 1970 compared with 304 in 1969.

Total cases of other infectious diseases notified were 5,910 in 1970 compared with 4,801 in 1969. The 1970 total includes 2,640 cases of measles (91 in 1969) and 115 cases of dysentery (819 in 1969). The principal diseases needing domiciliary visits are enteritis and dysentery, and relatively few cases of measles are visited. Thus, whilst there were more diseases notified in 1970, fewer domiciliary visits were made.

Staffing

During the year, six health visitors left the Service; two were pregnant, one emigrated to Canada, two moved to other posts, and one retired. One public health nurse left to take health visitor training, and one nursing assistant proceeded to train as an enrolled nurse. Two health visitors were promoted to centre superintendent posts within this Authority. Four health visitors, three state enrolled nurses and one nursing assistant joined the staff. Six newly qualified health visitors entered the Service in September, 1970.

Co-operation with Family Doctor Service

The successful attachment of community nursing staff to general practice is considered to be a firm basis on which future developments will take place, and in 1969 we introduced a pilot scheme of full attachment of two health visitors to a group practice of five family doctors, in order to make an assessment of the advantages and disadvantages of such a scheme in this area. The opinion of most of those who have been directly involved with

the scheme is that though some disadvantages are inherent at this stage, (particularly for the health visitor), the opportunity for consultation and the exchange of ideas which ensues is beneficial to all concerned, and that this is the over-riding factor.

In consequence, during 1970 we have converted some of our liaison schemes into full attachments, and introduced some new full attachment schemes. Twenty-six health visitors now cover the full case load of 50 family doctors. Some of these operate more successfully than others; some members of the teams are more enthusiastic than their colleagues, (both doctors and health visitors). Both however, are increasing their understanding of each other's role, which inclines them more readily to try to overcome difficulties as they arise. In the meantime, we hope that the patients and families are benefitting as a result.

The staff is particularly aware that in this setting opportunities exist for working with groups of people with whom previously they had little or no contact, and that health visiting practice in this context is extended to cover the whole range of activity in case finding, health education and care and after-care of patients and their families.

Co-operation with Hospital Services

We were aware of the need for increased co-operation between hospital and community nursing services. The report of the Dan Mason Research team, entitled "Home from Hospital," which was published during the year, affirmed the need to provide a more comprehensive care and after-care service. The pilot scheme which has been introduced in order to make basic assessments and analyses of our own local problems, prior to the necessary re-organisation and policy decisions which might ensue, has already been described. In the meantime, we continue to provide specialist services for diabetics, cases of tuberculosis and venereal disease, and for geriatric after-care.

SCHOOL HEALTH SERVICE

All children were medically examined in their first year in school. Other children have been examined by a process of selection, and referral has been largely at the instigation of teaching staff. The intention has been to select children who were failing in school or in whom there appeared to be a medical problem affecting education.

The success of such a scheme depends on frequent visits to school by a medical officer and close liaison with teaching staff. Scarcity of medical officer time has inevitably meant that visits to schools have been limited, and this is a source of regret.

More children than ever before have been subjected to audiometric screening, and during the year two nurses were able to test 4,354 nine-year-old children in school in addition to the five-year-olds screened by the Audiometrician.

The Medical Examination of Immigrant Children

The pre-school medical examination of all children arriving from countries abroad was continued.

If necessary, children were referred for specialist examination and treatment and a few were admitted to special schools. The following specific tests were made:

- i) Heaf Test, followed by B.C.G. vaccination or X-ray of chest as indicated.
- ii) Stool tests for pathological organisms and helminth ova.
- iii) Blood tests for anaemia.

A total of 1,023 children was examined compared with 1,238 in 1969.

At the end of the year there were 88 immigrant children on the registers of special schools.

SCHOOL	Asian	West Indian	TOTAL
Chapel Grange (E.S.N.)	4	10	14
Langley (Delicate)	6	3	9
Linton (Delicate and Maladjusted)	4	1	5
Lister Lane (Physically Handicapped)	15	—	15
McMillan (E.S.N.)	4	9	13
Netherlands Avenue (E.S.N.)	3	3	6
Odsal House (Deaf and Partially Deaf)	9	6	15
Temple Bank (Partially Sighted)	6	3	9
Thorn Garth	—	2	2

Vaccination and Immunisation

Immunisation against poliomyelitis, diphtheria and tetanus was offered to children at the school medical examinations.

For the first time measles vaccination was offered in school, and secondary school girls of 13 years of age were offered rubella vaccine.

Total vaccinations against rubella and measles were as follows:

Rubella	1,014
Measles	4,769

In view of these additions to our vaccination programme, the B.C.G. vaccination scheme, usually carried out in the autumn term, was postponed, and will be undertaken early next year.

School Casualties

Teachers continued to make full use of the casualty service provided at the Central Clinic for school children during term time.

Total casualties	...	...	...	...	...	981
Wounds requiring suture	...	...	...	...	...	65
Children referred to hospital	...	...	...	...	...	145
Total treatments given	...	...	...	...	...	3,099

Examination before Admission to Remand Homes

The total number of children examined before admission to remand homes was 185.

Examination of Teachers and Students

Routine medical examination of teachers on appointment, and students, proceeding to College, was carried out as follows:

Teachers	...	...	...	...	...	...	41
College entrants	...	...	...	...	...	...	336

Analysis of Cases reviewed by Oculist (Dr. R. L. Belsey and Dr. M. Davies)

							School Children
Errors of refraction	...	...	...	...	...	...	2,603
Squint	...	...	...	...	...	...	331
Other defects	...	...	...	...	...	...	10
Referred to hospital for orthoptic treatment	...	...	...	...	...	...	28
No. of children for whom spectacles were prescribed	...	...	...	...	...	...	1,245
No. of children for whom spectacles were supplied	...	...	...	...	...	...	937

Dr. Belsey has provided nine sessions each fortnight at the Central Clinic.

Dr Davies has held one weekly session at Odsal and at Green Lane clinics.

Audiometric Testing

The audiometric screening of each child in his first year of school life has continued. A total of 2,316 children was tested by the Audiometrician from the Bradford Royal Infirmary, and of these 213 were referred to hospital for further investigation.

Three school nurses who have received special training in this field, carried out audiometry on a further 5,048 children. Of these, 694 were tested in the Central Clinic, and 4,354 were nine-year-old children who were tested in school.

Speech Therapy

At the beginning of the year the Speech Therapy Department was staffed by Mrs. Cooper and Mrs. Axton. However, Mrs. Cooper resigned in May and Mrs. Axton in July, leaving the Department unstaffed until September when Miss Fleetwood and Mrs. Williamson were appointed.

Until July, sessions were held at Lister Lane and McMillan Special Schools, and at the following clinics:

Manor Row, Eccleshill, Allerton, Holmewood and Odsal.

Since September the Service has been expanded to provide sessions at Chapel Grange and Netherlands Avenue Special Schools (both E.S.N.), and at Bierley Clinic.

During the year 170 new cases have attended for diagnosis and treatment and 166 children have been discharged.

Attendances have been as follows:

School clinics	...	...	...	...	...	...	2,571
Special schools	...	...	...	...	...	...	432

Continuing the trend of recent years, a keen interest has been taken in the welfare of pre-school children, and in the new year it is hoped to establish a playgroup. A need for special management of immigrant children with stammers has been recognised and it is hoped to provide group situations in the new year.

Physiotherapy

At the end of 1970 the staff included four full-time and five part-time physiotherapists. They gave long-term treatments to children at Lister Lane, Langley Residential and Temple Bank Schools, Lindley House Training Centre and Wedgewood House.

Short-term treatments for postural defects and respiratory conditions were given at Manor Row, Odsal and Eccleshill clinics. Regular visits to advise staff and supervise cerebral palsied children were made to three day nurseries.

Chiropody

Unfortunately it was necessary to reduce the number of chiropody sessions at the Central Clinic from three to two per week when Mrs. O'Donoghue decided to work part-time. This resulted in a longer waiting list and fewer patients were seen during the year. A total of 399 children received 1,800 treatments. These were mainly for verrucae.

SPECIAL SCHOOLS

Linton Residential School for Delicate and Maladjusted Pupils

The spring term commenced with 104 children on roll. The vacancies were for delicate children.

All pupils went home for the Easter, Spring Bank, Summer and Christmas holidays. In addition, for the first time, there was a week's holiday in

October in conformity with other Bradford schools. During the summer, visitors and teachers were received from Dewsbury and Batley Technical Colleges. A week's exchange visit with the Royal Wanstead School proceeded very smoothly once again, and the 30 children who made the trip profited considerably. Educational trips were also made to a Wensleydale cheese factory and other local factories. Senior boys have completed a very successful five day hike.

No major alterations or improvements have been carried out, apart from the provision of some time switched outside lighting.

Lister Lane School

The number of pupils on roll in 1970 varied between 133 and 142. The major disability groups at the end of the year were as follows:

Cerebral palsy	...	...	...	...	...	47
Post-polio	...	...	...	...	...	19
Spina bifida	...	...	...	...	...	20
Congenital deformities	...	...	...	...	...	8
Perthe's disease	...	...	...	...	...	8
Muscular dystrophy	...	...	...	...	...	7

The number of children with multiple handicaps continues to increase. Over 50 children now require wheelchairs or similar aids to mobility. Two pupils have received 'Invacars' and two have electrically propelled appliances. Over 30 children needed daily toilet supervision.

The children between the ages of three and 17 years have been grouped into nine classes.

Twenty-seven pupils were transferred to other schools, and seven children left school at 16 years to be placed as follows:

To clerical work	...	...	...	...	3
To skilled craft apprenticeship	...	...	...	...	1
To industrial rehabilitation schemes	...	...	...	...	1
To Raphael House Centre	...	...	...	...	2

Two pupils entered G.C.E. 'O' Level examinations and gained five passes, and one leaver gained a C.S.E. examination pass. Three pupils gained six passes in R.S.A. examinations and one senior boy won the second prize in the Road Safety Essay Competition. Fifteen pupils gained A.S.A./S.T.A. swimming awards and a further 15 gained school swimming certificates. Fifty children have been swimming regularly either at school or at Eccleshill Baths. Some of the children swam in the Yorkshire Regional Polio Fellowship Gala, and one girl received an individual award.

During the year the heating system was converted to burn oil. This has proved more efficient but does not solve the problem of heating corridors, cloakrooms and toilet areas.

Two new school ambulances with improved seating and power operated ramps are expected shortly. Detailed plans for the construction of a classroom for a junior remedial class, for improved toilet and hygiene accommodation and additional fittings for the therapy pool are also expected.

Langley Residential School for Physically Handicapped and Delicate Pupils

In December there were 28 children on roll with 13 admissions and 13 discharges throughout the year. Nine of the children came from immigrant families. The predominant disabilities continued to be respiratory disorders affecting a total of 20 children.

Of the children discharged, one entered employment, two were transferred to E.S.N. schools and one boy was admitted to Wharfedale Children's Hospital. Nine children returned to ordinary schools in Bradford.

Swimming lessons at the Lister Lane and Wharfedale Hospital pools, under the supervision of the Physiotherapist, Mrs. Griffiths, continued to play an important role in the therapy of those children who suffered from respiratory disorders, particularly asthma. The confidence engendered and the improvement to breathing patterns has obviously contributed a great deal to their well-being.

Temple Bank School for Partially Sighted Pupils

There were 82 children on the register in January, and 84 in December. During the year there were 16 admissions and 14 discharges. Those admitted included 11 infants who were accepted after spending a short time at other schools, one older girl from normal school and four boys from the Commonwealth.

Children discharged included one boy to normal school, two children to schools for the blind, and five left the City. Six children left school at the statutory age of 16 years and found suitable employment. Two of the girls having qualified in C.S.E. examinations in Mathematics, Geography, History and English.

An epidiascope and two typewriters have been added to the School's list of equipment, and a commercial course commenced in October when a part-time teacher was appointed to give instruction to a small group of older girls. The indications are that the course is worthwhile and good progress is being maintained.

An improvement has been made to the lighting of the school and plans are in hand to alter the school gate and main exit early next year. Four members of staff attended a course on "The Partially Sighted Child" arranged by the Department of Education and Science at Westcliffe-on-Sea in April. The same members of staff are to attend further follow-up courses next year.

Odsal House School for Deaf and Partially Hearing Pupils

The number of children on roll in December was 158. This included 78 deaf and 80 partially hearing children. This shows an increase in the number of severe and profoundly deaf children. The children were educated in their own particular stream and it has been possible to separate those children who appear to have some useful hearing from the age of five years. An extra class was formed in a hastily improvised classroom to make this possible.

The supply and maintenance of hearing aids has been good except for periods when no further supplies of the more powerful 'Medresco' aids were available, and the use of the ear level hearing aid for those children whose residual hearing is reasonably good, has proved satisfactory. There is, however, a real need for more adequate hearing aids to be supplied to those children who are profoundly deaf.

A new type of speech trainer supplied by Peters of Sheffield, in the form of a trolley serving four children, has been acquired. This is a highly sophisticated piece of apparatus enabling the individual hearing needs of each pupil to be met to a greater extent than ever before.

The school co-operated with Manchester University in research into the use of hearing for speech development amongst young severely deaf children. London University also carried out research into the behaviour and speech usage of children at home. Many parents co-operated in this project.

McMillan Special Day School for Educationally Subnormal Pupils

There were 182 children on register at the beginning of the year and 185 in December.

In September, Mr. E. Armitage was appointed as Headmaster having succeeded Mr. Atkinson who retired due to ill-health. From September, swimming became part of the curriculum and classes attended Undercliffe and Wapping Baths. Other sporting activities and gymnastics have also developed.

During the year Mrs. Horsman, the Welfare Assistant, treated 1,357 minor ailments.

There has been a general review of the facilities within the school with special reference to the fact that the school may become a senior E.S.N. boys' school. It is hoped that a programme for re-building will start in May, 1971.

Chapel Grange Special Day School for Educationally Subnormal Pupils

The school has been fully staffed and there was a complement of 140 children on roll throughout the year.

The "Work Scheme" for leavers continued to develop and there is now a successful evening class at the Technical College attended by present pupils, old girls and some girls from the Blessed Edmund Campion High School.

During the year 16 children left school, three to employment, three to ordinary schools, three to a training centre and seven to residential schools. Swimming has remained an important part of the school life and one pupil gained the first gold medal in personal survival. Others gained two silver and four bronze awards.

Many educational visits were made to such places as the Great Yorkshire Show, Stump Cross Caverns, the Dales, Hornsea Potteries, Harrogate Puppet Festival, the Central Library and local museums and exhibitions.

Thorn Garth Residential School

There were 32 children on roll at the beginning of the year. Five boys left to take up employment, two were transferred to other schools, and two were admitted to a training centre.

The new classroom block was opened and although not yet fully furnished, it has greatly improved facilities and relieved the pressure on classroom space.

A 12 seater mini-bus has been provided by the "Friends of the boys of Thorn Garth."

A resident welfare assistant was appointed during the year but unfortunately it has not yet been possible to appoint a resident deputy matron.

Netherlands Avenue Special Day School for Educationally Subnormal Pupils

In January the school had a complement of 114 children which rose to 118 by the end of the year. Eight children left to take up employment in industry, 10 were transferred to other special schools, and two to a training centre.

The extension of the environmental experience for pupils continued with the aid of a school mini-bus, public transport and private cars. A variety of visits were undertaken, of historical, social, industrial and geographical interest. The leavers' programme included many visits to industrial concerns to give pupils an insight into the range of jobs available, and to give them ideas as to what they might do on leaving school.

School Nursing

The basic objective of the Educational System is to ensure that all children have an opportunity to develop their full potential. It therefore follows that if children are to be in a position to take advantage of these facilities, the level of positive health must be as high as possible, and it is at this point that the School Nursing Service subscribes to the general aims of the Education System. Consequently, this work embraces the whole field of physical, emotional and mental health, and involves not only the prevention and early detection of disease, but also assistance with health education.

This is a developing Service, and in the light of the changing needs of both the individual child and the Service as a whole, we are constantly faced with challenging situations which demand re-assessment of our priorities. We are conscious of the need to extend many aspects of the Service, e.g. the testing of hearing acuity, eyes, etc. At the same time, problems which have long been with us, particularly head infestation, remain unsolved. This year, we changed from routine examination of all children, in favour of selection and closer follow-up of those children known to be infested, and the following examples of annual statistics show some reduction in the number of children affected.

	1969	1970
Total number of individual examinations for head infestation	135,976	126,116
Total number of individual pupils found to be infested	4,310	3,856

School Nursing continues to be carried out by a team of Nurses and unqualified assistants. The team consists of the leader, Health Visitor/School Nurse, the Public Health Nurse, either S.R.N. or S.E.N., and an unqualified assistant. It is our policy to allocate work to the member of the team most suited to the job in hand, and whilst this is an important factor, it is not always a simple one. Consequently, during 1970, we set up a staff Working Party to study, amongst other things, the role of the Public Health Nurse and the Nursing Assistant, and this has given us an opportunity not only to study some aspects of the work in depth, but also to test opinions of field staff before decisions are made.

During 1970, we introduced State Enrolled Nurses to the team, and they proved a most valuable asset.

Full-time State Registered Nurses are employed at two Comprehensive Schools and Lister Lane Special School, in addition to Linton and Langley Residential Schools. The problems vary enormously, and staff cope remarkably well under what are sometimes difficult circumstances, particularly in the Residential Schools.

School Dental Service

Staff

The full-time equivalent of dental officers at 31st December, 1970 was 9.8, including one dental auxiliary (or approximately 5,500 children per dental officer) and represents a satisfactory staff situation. We acknowledge the valuable assistance of private practitioners who continue to work with us on a sessional basis: Mrs. M. E. Priestman, Mrs. B. W. Lewis, Mr. J. N. Moxon, Mr. P. Hall.

Mr. J. B. Hanson (Area Dental Officer) was obliged to retire in August, on medical advice, after eight years with our Authority and he left with the best wishes of all members of staff, for his future well-being.

Mr. J. S. Hardy, who had been a part-time dental officer for 11 years, withdrew when he decided on full-time private practice and we thank him for his fine service with us.

We welcomed to our ranks the following full-time officers:

Mrs. J. Lister, an experienced dental auxiliary, joined us from Halifax School Dental Service on 1st September, 1970.

Mr. N. J. Mayson, L.D.S., R.C.S., joined on 13th October, 1970.

Mr. M. J. Dobson, L.D.S., joined on 2nd November, 1970.

Mr. C. C. Duckworth, L.D.S., B.D.S., joined on 2nd November, 1970.

We were fortunate indeed to add to our staff three such experienced and capable dental surgeons who have established high reputations for themselves in private practice.

Staffing by dental surgery assistants remains sound and at full establishment. One D.S.A., well experienced in the subject, is employed on dental health education field work. This in turn allows the Dental Auxiliary to be employed almost entirely on clinical duties.

General anaesthetics staff consists of a full-time senior medical officer (anaesthetics) and a part-time G.P. medical officer.

Statistics

Statistics for the year's work are compiled under two headings reproduced in the Appendix Tables—'School Health Service—Dental Inspection and Treatment Statistics' and 'Dental Services for Expectant and Nursing Mothers and Pre-school Children.'

Although it is still not possible to inspect the total school population in twelve months, it is obvious from the work done that comprehensive treatment continues to be given, and there is an encouraging trend towards more fillings, root treatments, inlays and crowns (especially porcelain jacket).

Liaison

- (a) Co-operation with the Regional Hospital Consultant in Orthodontics (Mr. D. B. Johnson, F.D.S., D.Orth.) continued most satisfactorily with the completion of 16 'joint' treatment planning and diagnostic sessions at Manor Row Central Clinic during the year, with an average of 14 actual attendances per session.

We take this opportunity to place on record and to express our sincere appreciation and thanks to Mr. Johnson for sustaining the Hospital/Local Authority/General Practice liaison in general, and for his sterling services to the School Dental Service in particular, over the past three years. We wish him well in his new appointment as Regional Consultant at Leeds and are very glad to note that his successor, Mr. A. K. Tipnis, is prepared to afford us similar facilities, when he takes up his appointment in January, 1971.

- (b) Our longer and equally happy liaison continues with the Regional Hospital Consultant in Oral Surgery (Mr. H. D. Penney, F.D.S.) who, throughout the year, has dealt with a number of cases referred by us for hospital admission and surgical intervention, together with routine 'at risk' cases such as haemophiliacs, selected spastics and patients on special chemotherapies and so on.
- (c) Co-operation with medical and dental general practitioners progressed satisfactorily throughout the year with particular accent on the immediate treatment of 'accident' and emergency general anaesthesia cases referred by them (especially from 'single handed' practitioners).

Fluoridation

In each Annual Report since 1965, we have spelled out the very real need for primary preventive measures (as against secondary reparative measures) and have emphasised that the most effective and practicable method is undoubtedly that of fluoridation of the public water supplies.

The accumulation of evidence over more than thirty years from all parts of the world is overwhelmingly in favour of its acceptance. Of the scores

of organisations of international repute which have given their total blessing, we need name but three examples: The World Health Organisation, the Department of Health and Social Security, and the British Dental Association. It will be appreciated therefore, why we must record with profound regret that Bradford City Council continues to withhold its acceptance of this single, purely public health measure by which the whole community has so much to gain.

We hope, fervently, that the City Council may, in the very near future, accept that not only is it a *social necessity* but it is also a matter of *urgency*, as the full and lasting benefits of fluoridation will not be manifest in the community for several years.

Child Guidance Clinic

The various sources from which children were referred are listed in Table 23 in the Appendix. Most of these children present definite problems because of some unexpected and relatively isolated behaviour deviation. Not infrequently these cases indicate difficulties in the home or school and may point to some other individual who is in need of help. For example, a healthy boy, aged ten, was referred by his widowed mother because of difficult and unmanageable behaviour. Shortly after this referral a minor physical illness compelled the mother to undergo a period of in-patient treatment followed by convalescence, during which time the boy was cared for by his uncle. When seen at the Child Guidance Clinic after her period of convalescence the mother admitted that she realised that much of the boy's behaviour was within normal limits but that she in fact had been unable to cope with it because of her own generally poor state of health. We ourselves had examined her son and formed the opinion that he was a relatively normal boy who did not in fact require any special treatment. Unfortunately, we often find that the inter-relationship between the child and his parents has reached such a stage that some form of "parentectomy" is necessary. Such measures, however, have to be carefully prescribed as they have potentially harmful as well as beneficial implications. Furthermore, the inadequacy of suitable residential places often means that a child's removal from home is dangerously delayed, and further deterioration occurs as a result. It will be necessary for the Education Department to work out with the Social Services Department a dynamic policy of residential care for children with behaviour disorders which is therapeutic not only to the child but also to the parents. It will be good when decisions arrived at can be effected without delay. In this regard, we feel that much could be done to make the facilities at Linton even more effective. Unfortunately the 1944 Education Act makes it difficult for us to use this school to meet the needs of children living in the 1970s, as most of the special categories defined in that Act are relatively meaningless insofar as children with behaviour disorders are concerned.

There is an increasing demand for sex education in schools and a number of films have been produced. We feel that great care should be exercised in this regard, and the views of parents respected.

One is aware that some persons who are enthusiastic in proselytising sexual ideas may be doing so because they have problems of their own.

It is difficult to find people who are qualified to assess the contents of sex education material, and one would like to be certain that such experts are themselves sexually mature and their judgements accordingly trustworthy. In view of this, we owe it to our children to proceed cautiously, and above all it must be remembered that generalisations about the emotional status of children are completely meaningless, particularly when we are dealing with material that has considerable emotional content. Our children already have to cope with the impact that the greed and aggression of the adult world makes upon them, and it is hoped that they will not now be submitted to material euphemistically called sex education but which in fact could be extremely damaging.

We were sorry to lose Dr. H. Edelston, and would like to wish him a long and happy retirement in Israel.

During the year, Dr. Horsley and Dr. Gay joined the part-time staff of the clinic, and we greatly appreciate the help that we have received from teachers, social workers, health visitors, policemen and many others.

MENTAL HEALTH SERVICE

The need for community work to support patients suffering from mental disorder has placed great demands on the Service. Families, general practitioners, and other social agencies have come to expect that there should be a body of professional people who can take over the varied problems which the mentally disordered patient and his relatives have to face. The integration of the Mental Health Service with the Child Guidance Clinic has ensured greater efficiency as well as better job satisfaction, and it is to be hoped that this integration will not have to be entirely unscrambled as a result of the establishment of a Social Services Department.

Some chronic problems appear to beset us year after year. One is the shortage of staff; another burden of the rota system which is necessary if emergencies are to be properly handled. It is hoped that the shortage of residential accommodation may be eased by increasing the number of houses which can provide supervised accommodation, as it is apparent that hostel accommodation is rapidly becoming too costly and cannot be expected to cater for the overall demand. Discussions with the City Estates Department have led to the initiation of an experiment in which the Health Department will rent council houses and sublet these to suitable after-care patients. If this experiment is successful, it may be possible to extend it and thereby provide a substantial outlet for patients who have spent a period of rehabilitation in one of the hostels.

Prevention, Care and After-Care

National Health Service Act, 1946 (as amended by the Health Services and Public Health Act, 1968).

Several special services are provided as part of our responsibility for prevention, care, and after-care. These are:

(a) *Young People's Advisory Service*. Although there has not been a substantial increase in the number of persons consulting the Service, it still seems to be meeting a need, and probably we have now reached the stage where extensive publicity and improved accommodation should be used to improve the general image of the Service.

(b) *Alcoholic Clinic*. The Clinic, which is staffed by a consultant psychiatrist and social worker, is held monthly, and endeavours by ensuring early diagnosis the prevention of the development of chronic alcoholism. In addition to this, patients who have already been treated in hospital receive comprehensive after-care support.

(c) *Agoraphobic Club*. This club was started to meet the need of a large number of patients in the community who suffer from this condition. Patients and their relatives attend the club and take a very active part in its organisation. During the year, 44 people were members of the Club. The success of this Club has been largely due to the interest and efforts of Mr. W. R. Brown who retired in January, 1971. Mr. Brown has prepared the following report:

*The Agoraphobic Club has continued to function throughout the year. Regular fortnightly meetings have been held—therapeutic sessions and social activities alternating.

All members have benefitted from group meetings and the personal attention by the officers concerned. Individually members are now able to do much more away from their home environment. The annual dinner, held on this occasion some distance from the City, was a great success. The Consultant Psychiatrist who has all along taken great interest in club activities was chief guest. Towards the end of the year some research into the effects of agoraphobia in adults on their children was commenced.'

(d) *Mothers' Group.* This group has been greatly appreciated by the mothers who attend it, and the group discussions as well as the play therapy arrangements have helped many of them to gain a better understanding of the difficulties they were experiencing at home. In this way they have as a result been able to handle their situations in a more effective manner. Miss Cottle, who organises these groups, has reported as follows:

'The Group has remained very stable in its membership and yet has been able to accept several new members with some success. The average age range is no longer that of the very young mother and her child, confirming that age and emotional maturity are not equated. The children on initial inclusion in the group are presenting as much less disturbed than the original members, and seem better able to adjust to strange situations from the outset. This gives one greater hope for their stability in adulthood. The future of the group is, of course, in question, but one hopes that its purpose has been justified and that similar groups can be formed.'

(e) *Group for Immigrant Mothers and Children.* This Group was started for the first time in May, 1970, as a result of discussions between the social workers of the Mental Health Service and members of the immigrant community. It was felt that many of the mothers from immigrant families were leading an isolated and lonely life which not only hindered their integration into the community but also had a bad effect upon them and their children. The Group has now been functioning for 10 months, and Mr. F. Podmore, who is in charge of this group reports as follows:

'The Group caters for Asian mothers who have received treatment in psychiatric hospitals, and attendance at its fortnightly meetings forms part of the Local Authority's after-care service. The mothers are encouraged to discuss topics of interest such as the bringing up of children in this country, feeding habits, the education of girls, the question of their employment, family planning, etc., under the guidance of Mrs. Surana, Social Worker, without whose valuable help the Group could not have functioned. The children are at the same time encouraged to join in play under the care of other social workers. The progress of the mothers is carefully watched and a marked improvement in socialisation and self-confidence has been noted among the members. Cultural patterns and apathy are problems to be met in establishing this kind of group.'

(f) *Drug Liaison Committee.* This Committee consists of members drawn from numerous agencies involved with the prevention and treatment of drug addiction, and in addition to the Medical Officer of Health and the Deputy Medical Officer of Health, Mr. Foster, one of the social workers in this Service, is a member. The Mental Health Service is actively engaged in all the various aspects of the Committee's work, and the Social Worker who belongs to the committee has a special responsibility for the after-care of drug addicts living in the community. In Bradford, drug addiction is becoming an increasing problem, and the creation of a Drug Addiction Treatment Section at Lynfield Mount Hospital within the borders of the City increased the need for social work with drug addicts. Mr. Foster has submitted the following report:

'The formation of a Drug Liaison Committee has brought together people who are concerned with the increasing problem of drug abuse in an attempt to control its spread, and for effective forms of treatment and prevention to be carried out. The liaison with the Drug Unit has increased since its inception, and the social workers are

involved in the numerous social problems that the people present. Over the past year it has been possible to help a number of these young people with problems of employment, accommodation, and rehabilitation in the community. We have also seen a number of people who have come to the Department with problems of drug abuse which have not necessitated their admission to hospital, and it has been possible to form a group of young people with similar problems who meet from time to time to discuss the common problem of their abuse and/or addiction.'

Services for the mentally disordered

(Mental Health Act, 1959)

Three hostels, a junior training centre, a special care unit, and two adult training centres are provided in order to support mentally disordered patients in the community. Two of the hostels cater for adult patients, and together accommodate 53 residents of both sexes. One hostel is a small short-stay hostel for subnormal children which has made it possible to eliminate the need for short term admission of children to hospital for social reasons only. The existence of this hostel has encouraged many parents to keep their subnormal children at home, reassured by the knowledge that an acceptable alternative home will be available in a crisis. The number of children on the register of the Junior Training Centre was 143. The curriculum at the Centre has continued to become increasingly educational in its orientation, although the ratio of children to staff has remained somewhat higher than we would wish.

The number of children on the register of the Special Care Unit was 60. We are finding it increasingly difficult to discharge the children when their age and size makes it impossible for them to attend the unit, and it seems likely that some form of special care for doubly handicapped adults in the community will have to be provided in due course.

The two adult training centres between them provide 207 places for both sexes. One centre caters predominantly for females and its main objective is social training. The other centre caters predominantly for males, and its main object is industrial training. Several firms in the neighbourhood have provided work for the centre during the year; the total value of which work has amounted to £3,574. We would like to thank those firms and also the City Treasurer's Department for their assistance in undertaking the financial aspects of this work and the Trainees' payment Scheme.

Guardianship

Four persons were under guardianship during the year. There were no appeals to the Mental Health Review Tribunal.

Compulsory Admission to Hospital

A total of 244 persons was admitted compulsorily to hospital, whereas 607 were admitted informally. Mental welfare officers of the Service are usually involved in situations where compulsory admission is necessary, and in this way relieves the relatives and the general practitioners of a considerable burden.

Ancillary and Supplementary Services

Close co-operation with hospitals and the Local Authority has continued throughout the year. The general practitioners largely refer cases to this Service for investigation and possible admission to hospital. The arrangements for after-care of patients also involves close co-operation between medical and social work staff of the Mental Health Service and the general practitioners. The co-operation of the hospital services is strengthened by the fact that two social workers are jointly appointed by the Local Authority and the Hospital Management Committee, and three consultants from the hospitals hold their after-care clinics in the offices of the Mental Health Service. The scheme whereby the Principal Medical Officer for Mental Health undertakes the assessment of geriatric patients in the community has continued to work well throughout the year. This scheme not only diminishes the number of persons who have to visit the elderly, but it also ensures that a quick, efficient, and meaningful assessment can be made while the patient is still at home. The two consultant psychiatrists involved in this arrangement, and the Director of Welfare Services, have continued to lend their full support to the scheme, and have always readily accepted the advice offered after the geriatric assessment is completed. The National Association for Mental Health and the Bradford Society for Mentally Handicapped Children have both done a great deal to support the Mental Health Service in its work with the mentally disordered. The members of these associations have maintained very close links with the Mental Health Service, and their help, support and kindness are greatly appreciated. The local branch of the National Association for Mental Health continues to run its own hostel very effectively and successfully, and the authorities in the area greatly appreciated the service they have provided. Now that we are considering extending the provision of supervised accommodation in the community we have been able to depend on the National Association for Mental Health to help us with the provision of furniture and equipment. The Bradford Society for Mentally Handicapped Children has involved itself in considerable expense and time in order to train its own staff at Ardwyn House. This Centre has not only served to supplement the services provided by the Local Authority but has also ensured that the parents of mentally handicapped children have an organisation of their own through which they are able to encourage and support one another.

Registration of Homes

One residential home for the mentally disordered is registered under the National Assistance Act. This home is administered by the Bradford branch of the National Association for Mental Health.

GERIATRIC, CARE AND AFTER-CARE SERVICES

The problems of old people in the community came sharply into focus when new therapeutic measures and the fruits of preventive medicine combined to produce a sharp decline in the mortality of middle age, and a marked increase in survival of the 50–60 year-olds, and then in older persons.

Fifty years ago the number of old people was increasing slowly but steadily. In the last 20 years the percentage increase each year has accelerated, and at present about 12 per cent of the total population of England and Wales is over the age of 65.

The problems of the medical care of old persons in the community are more domiciliary than institutional, and are rather problems of social medicine and of medical administration than of clinical medicine.

As elderly females continue to outlive elderly males, whilst the age proportion of both sexes increases, we expect that in the immediate future the largest problem in domiciliary geriatric work will be that of the females over 75. They are the 'at risk' group, and the most vulnerable as well as the most frail members of the community who increasingly demand a constructive and analysed approach to the complex social and medical problems they present. Most of them strive to remain physically independent as long as possible, but some degree of dependence on relatives, friends, voluntary and statutory services is almost inevitable after the age of 75.

There is a similar growth pattern in the proportion of elderly people in the City of Bradford, and there are now over 40,000 people of pensionable age—some 14 per cent of the population. The number of old people whose ages have been stated on our maintained register shows the following age groups:

Age	Number	Per cent
—60	110	1.8
60—64	905	14.5
65—69	1,337	21.4
70—74	1,456	23.3
75—79	1,093	17.5
80—84	905	14.5
85+	437	7.0
	<hr/> 6,243	<hr/> 100.0

As the Seebohm Committee Report suggests, the best method of maintaining the elderly is in their own home with the domiciliary services helping them to retain their own place in the community. These services include those of the home helps, home nurses, health visitors, 'Meals on Wheels', and the Laundry, Loan of Medical Equipment and Chiropody Services. The 75+ spinsters and isolated elderly persons *depend* on these services. Even minor physical and mental illnesses call for the services of the general practitioner. To keep the old persons in their own homes means to create a fully comprehensive service for them (community care of the elderly), with the hospitals, general practitioners and the Health and Welfare Services of the Local Authority playing a corporate role.

The new Director of Social Services has taken over the Welfare Department in addition to the Children's Department. The welfare officers and children's officers will work together as social workers. It is hoped to have more close co-operation of these services provided for the elderly in Bradford. It is also hoped that there will be more community work, residential work and social planning instead of 'case work'.

Geriatric Register

The register now has some 14,850 names. The source of information for the register continues to be obtained from the Home Help Service, the Home Nursing Service, health visitors, Chiropody Service and the Transport Department. The 'at risk' groups on the register are the following:

1. Those over 70 who have been in hospital.
2. Those over 70 living alone.
3. Those socially isolated due to slum clearance or because they live in largely immigrant communities.
4. Those over 80.

There are about 6,000 such elderly on the register who need the maximum care and attention.

Geriatric Preventive and Advisory Clinic

This Clinic is held at the Holmewood Health Centre and is conducted with the co-operation of the Geriatric Health Visitor and the other health visitors working at this Centre. The persons who attended this Geriatric Clinic were interviewed by the Health Visitor concerned and at the same time completed a questionnaire form about their social background in their own home. These persons were then assessed by the Senior Medical Officer in respect of their social, physical and mental condition. Some routine investigations were made in addition to any special investigations, if required.

Thirty-five new persons were examined and advised, in addition to 40 reviews. The full report of their cases were sent to their general practitioners.

Total number of new persons — 35

Age 60—65	...	...	...	12
66—70	...	...	...	11
71—75	...	...	...	9
76—80	...	...	...	3
				—
Total	...	...	...	35

The maximum attendance of the age group 60—65 shows that this group is most interested in having the opportunity to attend a screening clinic, and that a check-up on physical, mental and social well-being is required at the pre-retirement age or soon after retirement.

Of these persons 25 per cent were really overweight, mainly due to diets that consisted of too many carbohydrates and insufficient proteins, fruit and green vegetables. Four cases were found to have mild diabetes and five had deafness. We have provided pamphlets and dietary instructions for those who were obese or not having a balanced diet.

The other abnormalities discovered were hypertension, raised blood urea, chronic bronchitis and emphysema and hiatus hernia.

This Clinic is now being moved to Odsal Health Centre to provide a screening and advisory service on a similar basis.

We would strongly suggest that the Local Authority make further financial provisions for the enlargement of these screening/advisory clinics for the elderly, because of the growing proportion of elderly people in the community. Without adequate screening at retirement or pre-retirement years, we shall continue to see the geriatric hospitals as they are today, crowded with long-stay patients. Diet is one of the main difficulties on 'the pension' due to the rapid rise in the cost of living. We should consider the provision of high protein food supplements at the clinics at reasonable rates on similar lines to the paediatric clinics.

Even the provision of mobile clinics cannot be ruled out when the ultimate aim is to maintain the elderly infirm in their own home. Greater links will have to be forged between the general practitioners and the Geriatric Services.

Medical Services for Residents of Welfare Homes

There is a total number of 725 patients, all residents of welfare homes who are on the restricted general practitioner list of the Senior Medical Officer. There are 14 welfare homes which are scattered all over Bradford. In addition to this number, residents of 'Glenholme' Mental Health Hostel are included in the Senior Medical Officer's list. The new and old residents of all the welfare homes are in the following age groups:

Age				Number
Under 50	...	...	...	6
51—60	...	...	...	12
61—65	...	...	...	26
66—70	...	...	...	47
71—75	...	...	...	97
76—80	...	...	...	150
81—85	...	...	...	184
86—90	...	...	...	136
91—95	...	...	...	61
Over 95	...	...	...	6
Total				725

These patients/residents are still generally infirm and can be put into the following groups:

1. The elderly, mentally infirm (predominantly women) requiring maximum medical care.
2. The elderly, who because of their degenerative changes of age and not being perfectly continent, need considerable help and supervision in daily living activities in welfare homes. These require trained nursing care.
3. Elderly frail but ambulant.
4. The elderly suffering from various short acute illnesses and minor ailments.

The above second and fourth groups of patients take up a considerable amount of the Senior Medical Officer's clinical duty time. There is always an increase in acute short period illnesses during winter months among the frail and chronic sick elderly which require considerable medical attention and care. There has been a sharp increase of mortality during these months.

The main welfare home 'The Park' which has 219 residents, is visited each morning for a clinical round, to attend to minor ailments and to treat the short illnesses of the patients who are transferred from other homes

because they need nursing care. The other 13 homes are each visited once a week to attend to minor ailments and to assess the previous treatment given. Some of them need a twice-weekly round.

This year 160 residents and 104 Welfare Department staff were vaccinated against 'Asian' influenza. This group will be observed in an effort to assess the degree of protection given by this vaccination, and will be compared with results obtained in the past.

Physical, Mental and Social Assessment of Patients Prior to Admission

In assessing residents for the welfare homes, it was expected that they would be rational, walk unaided (or with stick or frame), get in and out of bed unaided, wash and dress and carry out personal hygiene unaided, eat unaided and be able to enjoy full recreational activities. We have, however experienced a continuous rise in the actual age of elderly people—into the 80's and 90's—seeking welfare home accommodation, and this apart from the ageing of residents already in the homes. This year 65 patients were assessed in their own homes, at the hospitals, private nursing homes, rest homes and reception centres. These cases were referred from various sources, e.g. hospital consultants, general practitioners, welfare officers, medico-social workers, geriatric and other health visitors, and occasionally a member of the public. These cases were recommended as follows:—

	No.	%
Welfare Homes	41	63
Hospitals	15	23
Psychiatric Hospitals	4	6.2
Out-patients Dept	1	1.6
Day Centre	1	1.6
Private Nursing Homes	3	4.6
Total	65	100

About 30 per cent of the cases assessed were found to be in need of hospitalisation. This prior assessment prevented the movement back and forth of an elderly patient, to a welfare home and then the inevitable admission to hospital.

A part-time medical officer provided assistance with some of the routine visiting and is now doing six sessions per week. Two of these sessions are for special visits to the elderly in connection with their applications for rehousing on medical grounds. This year 278 such visits have been made. The Senior Medical Officer assesses the medical need in relation to rehousing. A total of 709 were assessed and were recommended for ground-floor accommodation, bungalows and others according to the individual person's requirements. Some of those who were not supported are to be reviewed again.

Senior Health Visitor—Geriatrics

The Senior Health Visitor has set up a close co-operation between the Geriatric Unit of the Hospital, the general practitioners and the Geriatric Section of the Health Department. During 1970 she made a total of 1,071 home visits. Of these, 294 were in connection with applications for re-

housing, 449 were done directly at the request of the Geriatric Unit and the remaining 328 special visits were for a variety of other reasons (e.g. suitability for day centre attendance, defaulters from the Centre, visits requested by other health visitors, general practitioners in combination with the Senior Medical Officer, Geriatrics). In addition she also attended the Geriatric Unit as required and Bierley Hospital once a week; the latter mainly to arrange new admissions to the Day Centre and to supply information useful to the staff and relations of the patients.

Co-ordination

The Geriatric Health Visitor, the Geriatric Preventive Clinic and the assessment of the residents of the Welfare Homes prior to admission gives the Department an important role in the co-ordination of social services with the hospital, local authority and family doctor services of the N.H.S.

District Nursing Service

An examination of the table of statistics in the Appendix shows little change in the pattern of work undertaken by the district nurse compared with previous years. There is a small decrease in the number of patients nursed in the home and in domiciliary visits paid. This is offset by an increase in the number of treatment sessions held, where either a full or partial attachment scheme with the family doctor is in operation. There are now four full and seven partial schemes, all of which are working smoothly. Four are based in the Local Authority's purpose-built medical centres; the remainder in the practitioners' own premises.

Summary of work undertaken at 'Treatment Sessions' (not included in annual statistical return).

Number of sessions held in medical centres				401
Number of sessions held in doctors' own premises				406
Types of treatment given				
		Medical Centres		Doctors' Own Premises
Injections	...	...	1,033	1,536
Dressings	...	...	357	580
Ears syringed	...	...	296	177
Others	..	...	—	130
			1,686	2,423

Staffing

The staff position has been satisfactory. Seventeen nurses joined the staff and 18 left. Of these, five returned to hospital posts, four to posts outside the National Health Service, three left the City, three went for further training, two left for family reasons and one died. At the end of the year there were three vacancies, of which two were for men.

Bathing Attendants

The bathing attendants have continued to make their useful contribution to the Service, making 11,731 visits during the year. These women continue to be employed on a part-time basis.

Hospital and Community Nursing Staffs' Exchange Visits

In July, 1970, a series of exchange visits between the ward sisters/charge nurses at Bierley Hall Hospital and health visitors/district nurses was arranged. These visits were followed by joint meetings. This proved to be a worth-while exercise; all participants appeared to gain a greater appreciation of their differing roles and problems. It is hoped to extend these visits and that the sisters/charge nurses of St. Luke's Hospital will be looking at the patients in their own home, whilst the 'community' nursing staff will have the opportunity to see the changes in patient care now occurring in the hospital.

Draw Sheet Service

The arrangements for the operation of this Service between the home helps, the Disinfecting (Cleansing) Station personnel, and the District Nursing Service have continued to work satisfactorily. During 1970, 239 patients used the Service.

Night Attendant Service

The provision of "night sitters" continues to be much appreciated by patients and their relatives. During 1970 48 households received help for periods varying from two nights per week throughout the whole year to one night only. Of the 10 requests for help we were unable to meet, five were supplied with night nursing help through the Marie Curie Memorial Foundation Day and Night Nursing Service. On average, 21 nights per week night sitting was provided.

Loan of Nursing Equipment

All applications for the loan of equipment are dealt with at the Edmund Street Clinic, and during 1970, 2,232 items were either issued to patients' relatives calling at the Clinic or delivered by Departmental transport.

There are 46 different types of equipment in stock available for loan, ranging from hydraulic hoists to walking sticks. Owing to the demand and the fact that the period of loan is tending to lengthen, stocks of the three most requested (and expensive) items have been increased to 260 commodes, 187 walking aids and 177 wheelchairs.

To ensure that equipment is returned when no longer required and to economise in the purchase of items, borrowers of equipment costing more than £1.50 are contacted quarterly to enquire whether equipment is still required.

Of items collected or returned during the year many items had to be destroyed, being unfit for re-issue either through age or hygienic condition. Amongst equipment destroyed were 18 commodes and 11 wheelchairs.

During the year 40 fireguards were issued to families with small children at risk, where the family could not or would not purchase a guard themselves.

Convalescent Homes and Holidays

There is no diminution in the number of requests for admission to the Semon Convalescents' Home, Ilkley, and at the commencement of each year, applications are received and dealt with for the current year.

It is most disappointing to late applicants that their applications sometimes cannot be arranged until the close of the summer, and at times it is not possible to accommodate all applicants. Under these circumstances a list is compiled, and the late applicants receive first consideration of a cancellation which often occurs as the weather begins to deteriorate.

Because of the many applications received each year, it has been necessary to restrict holidays to one holiday per person in two years, except in the case of applicants who have recently suffered an illness necessitating early convalescence, or who have recently been discharged from hospital. Every effort is made to secure early admission in these circumstances.

The stay at Semon Convalescents' Home is long remembered by applicants fortunate enough to have been allocated a holiday, and in the gloomy days of winter it gives the elderly something to remember, and a hope that they may soon return. Often firm friendships have developed from contacts made at Semon Home.

Holidays arranged for mothers, and children under the age of five years, have increased by eight during 1970. These holidays are arranged with the proprietor of a private boarding house in Blackpool, who at all times shows kindness and understanding to our mothers. The holidays arranged are of two weeks duration, and much appreciated by the recipients.

No requests for holidays for patients were received during 1970 from the Consultant Chest Physician at St. Luke's Hospital. It is most difficult to arrange holidays referred by the Chest Physician, as so few proprietors are prepared to accept tuberculous patients. The former accommodation for these patients became unavailable to us because of the ill-health of the proprietor.

Chiropody

Two further chiropody clinics were opened this year—the first in October at Albion Road, Idle (two sessions each week) and the second in November at Bierley Clinic (one session each week). The City is now covered by 17 chiropody clinics for the handicapped and elderly plus one for school children at Manor Row Clinic and periodic visits to the Handicapped Centres at Piccadilly and at Raphael House.

Alterations are due to commence at 20 Edmund Street for the provision of a Chiropody Appliance Centre, which will help cut the number of treatments needed by many patients and give them a greater degree of lasting comfort.

Supply of Free Milk to Patients referred by the Consultant Chest Physician

During 1970 new patients referred by the Chest Physician for a supply of free milk were three less than in the previous year.

Permanent cancellation of supplies for 28 patients receiving 2 pints of milk daily was authorised during 1970 by the Chest Physician, reducing the average weekly cost from £26.6.1 during 1969 to £11.8.5 in 1970.

The Bradford Co-operative Society which has supplied milk and given such good service from the start of the scheme closed down its dairy during the year, and milk is now supplied by Express Dairies.

Home Help Service

There is little change in the number of cases attended by the Home Help Service from year to year; the case-load is fairly constant but the 'work-load' per case varies. Home Helps are now giving rather less time to cases considered of lesser need in order that they may undertake more valuable duties such as ensuring that elderly people have fires lit for them during the winter months, receive breakfasts and nourishing mid-day meals. Requests for these lesser time absorbing services show a steady increase, and every effort is made to supply these requests. We consider that these services are imperative in many of the cases, as a means of giving some relief to relatives. The elderly are very appreciative of these "small services", which give genuine help and some companionship. They are the most difficult to organise, as the requests often come from dwellings spread over a large area.

It is interesting to note that the Home Help Service was originally a service to maternity cases, and in the earlier years it was not anticipated that the elderly would demand more and more of our time and energies to the extent that today approximately 90 per cent of our total cases are in this category.

The Home Help Service, because of the nature of its work, devotes more and more time to the care of the elderly than does any other of the domiciliary services, and is the largest of the services.

When the 'maternity service' was segregated from the rest of the Home Help Service into a single unit in 1964, and operated under the guidance of the Home Help Organiser from the Central Office at 22 Edmund Street, it absorbed 24 home helps working on a full-time basis. At the present time only six home helps are required. They are steadily occupied, working mostly on a full-time basis. It is only on the rare occasion they are all occupied on maternity cases at the same time, and during the intervals between maternity these home helps are allocated to elderly people who are temporarily without help. It may well be that early discharge from hospital following confinement, or husbands and relatives having increased periods of holidays with pay, accounts for the decrease in applications in this section of the Service. This situation is quite contrary to expectations, following the inception of early discharge from hospital in maternity cases.

There is little difficulty in the recruitment of women willing to undertake work as home helps at the present time. It is vital, of course, to ensure that the right type of woman is appointed—one who understands and can accept domestic difficulties, and possesses the ability to adapt herself to the many 'situations' she may encounter in the course of her daily duties.

The year 1970 is the last complete year of the attachment of the Home Help Service to the Department. We are grateful for the close liaison we have had with this Service which so often gave help at very short notice in extremely difficult cases.

Rehousing on Medical Grounds

The work of the section continues to grow mainly because of the shortage of ground floor accommodation and small one and two-bedroomed accommodation. The present situation is such that unless an applicant has clearance or medical priority it is extremely unlikely that they can be offered small accommodation. There is no shortage of three-bedroomed accommodation and upper maisonettes which continue to be let under the normal "Points" scheme.

In 1970 1,298 applications were received of which 523 were given medical priority. Out of a total of 3,578 lettings by the City Estates and Housing Department only 363 were allocated to medical cases. Therefore, there continues to be a list of medicals totalling 914. The majority of these applicants are waiting for ground floor accommodation and many of them refuse to consider a flat and prefer to wait for a bungalow. The Corporation has only 846 bungalows the tenancy of which changes hands very slowly. This year 899 applicants were visited in their own homes (69.3%) and assessments made by the interviewer were considered very carefully before a recommendation was made to the Housing Department. The rest were interviewed in the Department or assessments were made on information supplied by G.P.'s direct to the Deputy Medical Officer of Health. The following gives a breakdown of the work done in 1970:—

		Rehousing (non-Corporation houses to Corporation houses)	Transfers (from one Corporation house to another)	TOTAL
		1970	1970	1970
(1) Cases considered on medical grounds		547	751	1,298
(2) Cases supported on medical grounds		252	271	523
(3) Cases recommended for ground floor accommodation included in line (2)		220	152	352
(4) Total lettings by the Housing Department		2,914	664	3,578
(5) Actual lettings on medical grounds				
Ground floor accom.	96)		54)	138)
Bungalows	20)	116	1) 55	31) 171
Others		62	103	165
		<u>178</u>	<u>158</u>	<u>336</u>
(6) Total actual lettings—line 5 —as percentage of total lettings—line 4.		6.6	18.5	8.9
(7) Cases previously supported, but not yet rehoused at 31.12.70				
Ground floor accom.	299)		296)	595)
Bungalows	5)	304	15) 311	20) 615
Others		189	110	299
		<u>493</u>	<u>421</u>	<u>914</u>

It is expected that the priority waiting list will be shortened when the 1,500 proposed new dwellings for elderly and handicapped persons are available for letting.

AMBULANCE SERVICE

The total of patients carried, for the year ending 31st December, 1970, was 287,958, and the mileage involved in the transport of these patients amounted to 694,966.

These figures show a decrease of 7,701 patients carried and a decrease of 35,096 miles travelled when compared with the patient and mileage figures for 1969.

Because of 'industrial action' by the Ambulance Service operational staff from 8th October to 9th November, 1970, inclusive, the transport of 'welfare' patients, mentally handicapped persons, and day hospital patients to the various centres was suspended. This accounts for a decrease of 5,738 welfare type patients carried and a decrease in welfare mileage of 22,336 during 1970.

There was also during the year under review a decrease in the number of "Section 27" patients carried, and in consequence a reduction in the number of miles travelled in the transport of these patients.

Table 31 in the Appendix gives the full comparative patient and mileage figures for 1969 to 1970.

During the period of industrial action mentioned above, a full ambulance service for all types of "Section 27" patients was maintained to all hospitals.

Transport of Geriatric Patients

Transport of geriatric patients by the Ambulance Service continued throughout the year and the following table gives the numbers of patients carried to the various day hospitals and the mileage involved:

			Patients		
			1969	1970	Difference
Bierley Hall Day Hospital	...	...	11,071	11,952	+ 881
Northern View Day Hospital	...	...	2,782	2,772	- 10
Lynfield Mount Day Hospital	...	...	2,810	4,735	+1,925
Highroyds Day Hospital	...	...	885	754	- 131
			<hr/>	<hr/>	<hr/>
			17,548	20,213	+ 2,665
			Mileage		
Bierley Hall Day Hospital	...	...	18,913	18,896	- 17
Northern View Day Hospital	...	...	8,198	6,446	-1,752
Lynfield Mount Day Hospital	...	...	9,576	12,856	+3,280
Highroyds Day Hospital	...	...	7,199	6,556	- 643
			<hr/>	<hr/>	<hr/>
			43,886	44,754	+ 868

These patient and mileage figures are included in the numbers given in the Appendix Table 31 under the "Section 27" heading.

Mentally Handicapped Persons

The Ambulance Service carried 119,717 mentally handicapped persons to and from the various schools and training centres in the City during 1970, and the following table gives the numbers carried and miles travelled to each centre, with the comparative figures for 1969.

Patients			
	1969	1970	Difference
Lindley House Training Centre ...	59,435	57,642	— 1,793
Wedgwood House Training Centre ...	23,010	21,290	— 1,720
Melville House Adult Training Centre ...	33,253	35,144	+ 1,891
Thornlea Nursery	145	—	— 145
Glenholme Hostel	5,331	5,425	+ 94
(Mentally handicapped persons' outings)	189	216	+ 27
	<hr/> 121,363	<hr/> 119,717	<hr/> — 1,646
Mileage			
Lindley House Training Centre ...	56,820	51,724	— 5,096
Wedgwood House Training Centre ...	42,674	36,201	— 6,473
Melville House Adult Training Centre ...	42,865	42,240	— 625
Thornlea Nursery	730	—	— 730
Glenholme Hostel	9,964	9,548	— 416
(Mentally handicapped persons' outings)	1,024	652	— 372
	<hr/> 154,077	<hr/> 140,365	<hr/> — 13,712

A total of 28 mentally handicapped adult patients was conveyed by ambulance coach from the Melville House Training Centre on holiday to Blackpool on 8th May, and returned to Bradford on 15th May, 1970.

Physically Handicapped Persons

The daily journeys (Monday to Friday) carrying handicapped persons on behalf of the Welfare Department to the Piccadilly, Raphael House, and the Park Welfare Centres, etc., by the special Ambulance Service coaches, continued during the year, and 43,146 patients were transported. This is a decrease of 2,631 compared with the figures for 1969.

Arrangements were made on behalf of the Director of Welfare Services for 144 handicapped persons to have holidays in Blackpool in groups of 48 over three-weekly periods. During these periods, two special ambulance coaches and three ambulance men were placed at the disposal of the patients to enable them to visit places of interest and amusement.

Several day and evening outings to the Yorkshire Dales and to west and east coast holiday resorts were also made throughout the year.

The following is a list of special journeys made on behalf of the Welfare Department and the Mental Health section of the Health Department:

Welfare Department

March 3rd	15	P. H. P.	to Cardinal Hinsley School
April 27th	39	"	to Clitheroe, Skipton, Ilkley areas
April 28th	16	"	to Manchester Airport
May 4th	73	"	to St. George's Hall, Bradford
May 6th	36	"	to Harrogate area
May 14th	42	"	to Ingleton area
May 16th	48	"	to Lytham St. Annes (1 week holiday)
May 28th	38	"	to Long Preston area
May 30th	49	"	to Lytham St. Annes (1 week holiday)
May 31st	12	"	to Bradford Cathedral (Arthritis Week)
June 30th	39	"	to Ripon, Harrogate, Knaresborough areas
July 2nd	14	"	to Ripon, Harrogate, Knaresborough areas
July 7th	12	"	to Margaret Clitheroe School
July 23rd	28	"	to Fleetwood
July 27th	44	"	to Harrogate
August 4th	45	"	to Harrogate
August 10th	37	"	to Milnrow area
August 12th	38	"	to Milnrow area
August 13th	35	"	to Hollingworth Lake
August 19th	32	"	to Fleetwood
August 24th	27	"	to Belle Vue, Manchester
August 27th	28	"	to Harrogate
September 1st	42	"	to Hollingworth Lake, Rishworth area
September 26th	49	"	to Lytham St. Annes (1 week holiday)
December 2nd	48	"	Christmas Shopping
December 15th	37	"	to a Christmas party
December 15th	96	"	to a Christmas party
December 17th	34	"	to a Christmas party
December 22nd	91	"	to a Christmas party

The Mental Health Section (Health Department)

May 8th	28	patients	from Melville House to Blackpool (1 week holiday)
July 16th	24	"	" Glenholme to Harrogate, Knaresborough areas
July 24th	22	"	" Glenholme to York
July 28th	17	"	" Thornlea to Belle Vue, Manchester
August 20th	15	"	" Thornlea to Knaresborough

Blind Welfare

Ambulance-coach transport was supplied throughout 1970 for blind persons from their homes to the Blind Welfare Centre in Morley Street. The total number of blind persons carried was 3,773; a decrease of 1,001 compared with figure for 1969.

On 18th August, 1970, a party of 34 blind persons was taken by ambulance coaches on a day outing to the Harrogate area.

Ambulance Fleet

All vehicle maintenance of Ambulance Service and other Departmental vehicles continued to be carried out at the Ambulance Headquarters. At the end of 1970, the ages of the vehicles were as follows:

	0-1 yrs	1-2 yrs	2-3 yrs	3-4 yrs	4-5 yrs	5-6 yrs	6-7 yrs	7-8 yrs	8-9 yrs
Dual Purpose Ambulances	—	—	4	—	11	3	3	—	8
Ambulance Coaches	—	—	4	2	—	2	—	—	—
Sitting Case Cars	—	—	—	1	—	—	1	1	—
Other Departmental Vehicles									
Disinfecting Station									
Vans	1	—	—	2	—	1	1	—	—
Cars	—	—	—	—	—	—	—	1	—
Maternity/Child Welfare Department									
Vans	—	—	—	1	—	1	—	—	—
Cars	—	—	—	—	—	—	1	—	1
Home Nursing Department									
Cars	1	—	—	—	1	1	2	—	—

Operational

It is gratifying to report that during the year several letters have been received expressing appreciation of the service given by members of the staff in the course of their duties.

The Ambulance Service continued throughout 1970 to accept and deal with all messages for the other sections of the Health Department during non-office hours, including weekends and public holidays.

The midwifery two-way radio service is also controlled from the Ambulance Headquarters during the above hours, and stocks of smallpox vaccine and diagnostic kits, cholera vaccine, etc., are kept for any emergencies which may occur.

EPIDEMIOLOGY

Infectious Diseases

The Notification of Infectious Diseases

The Health Services and Public Health Act, 1968, and the Regulations made thereunder, the Public Health (Infectious Diseases) Regulations, 1968, came into operation in October, 1968.

The Regulations consolidated with amendments all previous Regulations relating to the notification and prevention of infectious disease except the Public Health (Prevention of Tuberculosis) Regulations, 1925.

The following diseases are now notifiable in Bradford:—

Acute encephalitis	Measles
Acute meningitis	Ophthalmia neonatorum
Acute poliomyelitis	Paratyphoid fever
Anthrax	Plague
Cholera	Relapsing fever
Diphtheria	Scarlet fever
Dysentery (amoebic or bacillary)	Smallpox
Food poisoning (and Salmonellosis)	Tetanus
Infective enteritis	Tuberculosis (including non-pulmonary)
Infective jaundice	Typhoid fever
Leprosy	Typhus
Leptospirosis	Whooping cough
Malaria	Yellow fever

Routine investigation is made of all cases notified as suffering from enteritis, dysentery, salmonellosis, enteric fever and food poisoning. Cases of food poisoning are dealt with by the food inspectorate; field work in respect of the other diseases is carried out by two public health nurses specially appointed for the work. Where a visit to a household is necessary only to collect specimens for bacteriological examination, after the initial visit by the Public Health Nurse, the work is done by a Health Department driver. During an average year the nurses and drivers make about 12,000 visits to notified cases of infectious diseases in about 2,500 households. These are principally gastro-intestinal infections.

The specimens collected are submitted to the Public Health Laboratory at 18 Edmund Street, where they are rapidly examined and the results reported to us. We are greatly indebted to Dr. H. G. Smith, the Director, and to his staff, for the assistance we have received throughout the year. Our thanks are also due to Dr. A. J. Wellsted, Consultant in Infectious Diseases at Leeds Road Fever Hospital, for valuable assistance with cases admitted to the hospital during the year, and with investigations arising out of their occurrence. We are particularly grateful to him for his willingness to admit patients who are not so ill as to justify admission in normal circumstances, but who are admitted as a temporary means of solving some apparently insoluble domestic problems.

The More Common Infectious Diseases

Measles

Cases 2,640: Deaths 1.

The intensive vaccination campaign in 1968 secured protection for the greater part of the eligible school-child population. We had hoped to

diminish the reservoirs of infection in schools, and hoped that when pre-school children had been vaccinated, and when babies were being vaccinated routinely at the age of 13 months, the problem of measles would be nearing solution.

Before the advent of vaccination against the disease, measles demonstrated a biennial peak of incidence, and the regular pattern of these waves of cases every two years was due to the gradual accumulation of a new generation of susceptible children in the community. As the cycle often overlapped from one year into another, the *annual* number of cases was fairly constant and in this City averaged about 2,200 each year.

In 1969 only 91 cases were notified and this massive decrease compared with the previous annual average led us to believe that the incidence of measles would decline in the dramatic fashion of diphtheria and poliomyelitis in previous years. We were unfortunately wrong, and in 1970, 2,640 cases were notified. Quite obviously we had not yet vaccinated a sufficient number of susceptible children to make for a progressive decline in incidence. Our experience was shared by most other parts of the country. Notwithstanding this apparent set-back there is no reason to believe that vaccination against measles does not confer a high degree of immunity to the individual.

A commentary on vaccination during 1970 is given later in this chapter.

Whooping Cough

Cases 161: Deaths 1.

Vaccine trials in 1951, 1956 and 1959 showed that some batches of pertussis vaccine gave substantial protection. Widespread vaccination followed and the incidence of whooping cough declined in England and Wales until 1962. Notifications increased appreciably in 1963, and since then have not declined consistently.

It has been concluded that poor protection was afforded by the original vaccines, and that vaccination in early infancy, a long interval between vaccination and a manifestation of the disease in an individual, and the absence of booster doses, were not responsible factors.

Today we are seeing atypical cases of whooping cough in vaccinated children—the “paroxysm without the whoop”, with or without vomiting—but have confirmed many of these by isolating *B. pertussis* from pernasal swabs.

The production of an effective vaccine is currently the subject of much experimental research.

Scarlet Fever

Cases 77: Deaths 0.

There was an increase in the number of notifications from 125 in 1968 to 171 in 1969, and it was thought that the illness might again be becoming severe, after an indication over several years that it was becoming milder. Happily, in 1970 the number of notifications was the lowest on record at 77 and there were no deaths.

Nose and throat swabs are taken from all food handlers, etc., who are in contact with cases of scarlet fever. In latter years we have seen rather more swabs positive for group A haemolytic streptococci, and several food handlers have been temporarily excluded from work.

Infective Jaundice/Hepatitis

Cases 293.

During 1969, the first full year in which notification of this infection was required, 429 cases were reported.

It seems possible that a statutory notification has concentrated attention on the diagnosis and treatment of this condition; the prophylactic use of immunoglobulin, especially in closed communities such as nurseries, has certainly terminated a number of local outbreaks.

Dysentery

Cases 115: Deaths 0.

In 1969 we reported that there had been a considerable increase in the number of notified cases of dysentery; nearly all due to *Shigella sonnei*. In 1970 the number of cases was 115; an astonishingly low figure in the light of our experiences over many years. There is no ready explanation for the quite remarkable fluctuations in the annual incidence of this disease in successive years. We hold that the disease is food-borne and each year an appreciable number of food-handlers are laid off work, either because they are suffering from the disease (almost invariably after the first 24 hours or so as 'symptomless excretors') or because they are household contacts of a case or excretor. Nevertheless, we have never *demonstrated* that the disease is food-borne, and believe that the foci of infection in this City are the day nurseries, nursery schools, residential establishments (children in care, etc.). The disease is essentially spread from bowel to mouth, most often from soiled (unwashed) hands and from soiled articles, but is also probably spread by 'droplet' infection onto clothing after the flushing of toilets. It is of course, extremely difficult to supervise a large number of very active children in a day nursery, and it would seem that 100 per cent aseptic toileting of these babies would almost demand a nursery nurse for each child.

The mother of a small child who is suffering from dysentery often contracts the disease herself. Other children in the household may spread the disease to infant and junior schools, and so, once a few cases have been introduced into the area, there is a ready explanation for the 'smouldering on' effect of the disease.

In this area, where a greater-than-national-average number of women work, an explosive outbreak of dysentery in, say, a day nursery, is potentially of great hazard, as many of the mothers will be found to be food-handlers, hospital nurses, cleaners, nursery and infant school teachers, etc.

Cases of dysentery are thoroughly investigated. Sometimes the mother of an infected child is found to be expecting another child forthwith, and is booked for hospital delivery. In recent years, episodes of *E. coli* infection, dysentery, non-specific enteritis, etc. in maternity units have been disastrous, and elaborate steps are taken to try to keep dysentery from these units.

It is hoped that during 1971 we may resume experimental work in the day nurseries to try once more to establish the exact mode of spread of infection.

Infective Enteritis

This disease is notifiable in Bradford, and over the years medical practitioners have notified diarrhoeal conditions as 'infective enteritis' knowing that the Department would obtain faecal specimens for bacteriological examination, and that a few of the specimens would yield *Shigella sonnei*, a salmonella—or occasionally *Shigella flexneri*.

If specimens from patients notified as suffering from, say, suspected food poisoning yield no pathogens, the patient is debited to the total of enteritis cases. The total number of cases of infective enteritis recorded during the year was 2,220; less than in 1969 but in accord over the long term with the general increase of the last few years.

The number of cases of fulminating and severe gastro-enteritis in infants and young children still causes concern. The following table shows the number of deaths in such children certified as being due to gastro-enteritis or infective enteritis in the last four years:—

	Age at Death		
	0—6 months	6—12 months	1—5 years
1967	6	5	3
1968	5	3	2
1969	6	2	3
1970	4	3	—

During the year a total of £290.50 was paid by the Department as compensation for loss of wages to 24 persons who had been requested by the Medical Officer of Health to stop their employment in order to prevent the spread of infectious disease. In most cases the disease was dysentery or gastro-enteritis.

These persons are healthy, but are excreting a potentially infectious organism. As they are not 'ill' by the normally accepted definition they are eligible for Social Security Sickness benefit only if 'incapacity' (really a desirability that they do not work) is certified by the Medical Officer of Health. Recipients of sick benefit have their pay made up by partial compensation. Others, mostly married women working part-time, and not normally in receipt of sickness benefit, are compensated for the whole of their loss of pay. The power of the Local Authority to pay compensation is a great aid in infectious disease control in that it secures the co-operation of employees in the food trades.

The Less Common Infectious Diseases

<i>Diphtheria</i> <i>Poliomyelitis</i> <i>Anthrax</i> <i>Smallpox</i>	} There were no cases of these diseases during the year.
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Encephalitis

Cases 2: Deaths 1.

There were two cases of post-infectious encephalitis. A four-year-old child died from encephalitis following measles. A two-year-old child, finally diagnosed as meningo-encephalitis, was making slow progress at the end of the year

Ophthalmia Neonatorum

Cases 7: Deaths 0.

The number of cases seen remains satisfactorily low, and has not altered significantly since 1951.

Malaria

Case 1: Deaths 0.

In latter years, each year, on average, some five cases have been notified. Only one such case was notified in 1970—a six-year-old Asian child. The cases are mostly found in immigrants who have recently arrived in the City, and who have contracted the disease outside the United Kingdom. The disease is not, of course, transmissible in this country.

Enteric Fever

Typhoid Fever

Cases 2: Deaths 0.

Paratyphoid Fever

Cases 2: Deaths 0.

Since 1965, 54 cases of typhoid or paratyphoid fever have been notified. This is an average of nine cases each year. Usually the cases of enteric fever occur in newly arrived Asian immigrants, who usually presents as pyrexias of unknown origin.

In 1970 there were two cases of typhoid fever and two cases of paratyphoid fever:

1. A newly arrived Asian man became ill, was admitted to hospital, and was found to be suffering from paratyphoid fever (*S. paratyphi* A). He spent three and a half weeks in hospital and made a complete recovery.
2. A six-month-old West Indian baby, born in the U.K., was found to be excreting *S. paratyphi* B. An exhaustive search failed to reveal the source of infection. The baby made a complete recovery, having spent three months in hospital.
3. An English woman, recently returned from holiday in Spain, became ill with what proved to be typhoid fever (Phage type 46). She made a complete recovery after one month in hospital.
4. A newly arrived Asian woman was found to be suffering from typhoid fever, and was admitted to hospital for two months (Phage type A). She made a complete recovery.

No secondary cases occurred.

The possibility that a person who has suffered from enteric fever, and who has been discharged from hospital only after yielding six or so successive negative specimens, might subsequently be an intermittent excreter of the disease, is borne in mind. Repeat specimens are taken from these persons

from time to time in an effort to preclude the possibility of subsequent infection of the community by, say, a person who has gone into the food trades.

Leprosy

Cases 0: Deaths 0.

During the last eight years, 24 cases of leprosy have been notified. Six cases were notified in 1969, but none in 1970. The disease is not normally communicable in this country. It is restricted to the much warmer climates and is transmitted only after prolonged and intimate contact, such as by a mother to her child. It is not, therefore, of epidemiological significance in this country. Nevertheless, leprosy can be crippling to the patient, and this Department plays its part, in co-operation with the local dermatologists and consultant physicians, to secure continuous treatment for these patients until the disease is arrested. Our part is to trace patients who have 'gone missing', and who have failed to keep a periodic appointment at one of the hospitals.

Food Poisoning and Salmonellosis

Two outbreaks of food poisoning occurred at the same factory canteen, with an interval of five weeks between. Both were due to *C.1. welchii*, and in each case the meat was cooked on one day, and on the following day warmed up, after slicing, for consumption half an hour later.

In the first episode 40 cases were ascertained and two pieces of inflift were the source of infection. In the second 20 cases were ascertained and again two pieces of inflift were the source. The clinical features of each were almost identical—average interval between ingestion and onset was 15 hours; the main symptoms were diarrhoea with abdominal pain; the severity of the illness was moderate and the duration generally short.

In the first episode, after removal from the oven the meat was put on a plate and placed in a ventilated cupboard situated on top of the refrigerator in such a position that it would be affected by the warm air rising from the refrigerator motor. In the second, after removal from the oven the meat was put on a plate and placed in a ventilated cupboard on a shelf in the food store.

These episodes are illustrative of the difficulties encountered in our efforts to teach food hygiene. It would have been better if the cooked meat had been refrigerated overnight, and better by far if the meat had been eaten on the day it was cooked. The first episode was to be deplored—the second should never have happened, and 20 persons became ill because a lesson "learned" was forgotten in five weeks.

There were 57 cases of salmonellosis noted during the year. These cases were classed to 'salmonellosis' as distinct from 'food poisoning' as food was not *demonstrated* to be the vehicle of infection.

In two family outbreaks caused by *S. typhimurium* five cases were ascertained, and there were 15 sporadic cases—a total of 20.

As far as other salmonellae were concerned, in five family outbreaks 14 cases were ascertained, and there were 23 sporadic cases—a total of 37.

The 'other' salmonellae were as follows:

SALMONELLA					No. of cases
senftenberg	...	...	...	...	1
livingstone	...	...	...	...	1
wein	...	...	...	...	5
barreilly	...	...	...	...	2
saint Paul	...	...	...	...	1
enteritidis	...	...	...	...	4
agona	...	...	...	...	5
un-named	...	...	...	...	1
panama	...	...	...	...	4
heidelberg	...	...	...	...	1
thompson	...	...	...	...	1
dublin	...	...	...	...	3
gombe	...	...	...	...	1
durban	...	...	...	...	1
anatum	...	...	...	...	2
weltevreden	...	...	...	...	1
ibadan	...	...	...	...	3

Venereal Diseases

We are indebted to Dr. L. Z. Oller, Consultant Venereologist, for the following report:

“In 1970, 2,319 new patients (1,551 male, 768 female) were registered at the Special Treatment Centre in Bradford. In addition 14 men and eight women were transferred from other Centres in England and Wales. The total of 2,341 represents a 2.2 per cent increase on the 2,290 cases reported in 1969.

The overall incidence of gonorrhoea increased only slightly (from 612 in 1969 to 616 in 1970). There were 404 cases of sexually acquired gonococcal infection in the male (390 in 1969), 210 cases in the female (211 in 1969), no cases of gonococcal vulvovaginitis in children (seven in 1969) and two cases of gonococcal ophthalmia neonatorum (four in 1969). Gonorrhoea increased amongst the Asians and the West Indians, but was reduced in men born in the U.K. and in other Europeans:

Year	U.K. born		Asians		W. Indians		Others		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
1961	129	(20)	285	(46)	147	(24)	64	(10)	625	(100)
1962	120	(19)	284	(43)	216	(32)	44	(6)	664	
1963	148	(21)	279	(40)	231	(32)	49	(7)	707	
1964	161	(21)	384	(50)	183	(24)	41	(5)	769	
1965	110	(21)	248	(47)	126	(24)	46	(8)	530	
1966	160	(28)	255	(45)	123	(21)	33	(6)	571	
1967	179	(31)	212	(37)	140	(25)	38	(7)	569	
1968	199	(42)	138	(30)	114	(23)	26	(5)	477	
1969	185	(47)	101	(26)	82	(21)	22	(6)	390	
1970	167	(41)	134	(33)	91	(23)	12	(3)	404	

Of the female patients 188 were born in the United Kingdom, eight were Irish, three were from other parts of Europe, seven from the West Indies, two from Africa and two from Asia.

The re-infection rate was 19 per cent in the male and 17.1 per cent in the female patients: 501 individuals were responsible for the 614 sexually acquired cases of gonorrhoea. Of the men 210 and of the women 73 were aged 25 years or more; 105 men and 85 women were between 18 and 24 years. Twelve boys and 16 girls were under 18, of whom two boys and three girls were under 16. Most of the patients were infected in Bradford or elsewhere in the United Kingdom, but 12 men and one woman contracted the infection abroad, and four men did not reveal the source of their infection.

There was a significant decrease in the incidence of syphilis both in the early stage and in all forms of the late stage. Two men and three women, (all above the age of 25 years) suffered from early infectious syphilis (compared with a total of 19 in 1969). Four had been infected locally and one man, a seafarer, had acquired his disease abroad. Late forms of syphilis were recorded in 10 patients (17 in 1969). These included two cases of cardio-vascular syphilis, two of neuro-syphilis, four of latent acquired syphilis and two of late congenital syphilis.

Four West Indian patients, (two men and two women) were treated for latent yaws. There were no cases of chancroid, lymphogranuloma venereum or granuloma inguinale.

Of a total of 1,684 patients who attended the Centre with conditions other than gonorrhoea, syphilis and yaws, 1,137 were males and 547 were females. Among the men 446 had non-specific urethritis (including three cases of Reiter's Disease), 320 were treated for other genital infections and 346 had conditions which did not require treatment. Amongst the women 194 had trichomoniasis, which in 94 of them (over 48 per cent) was associated with a concurrent gonococcal infection, 189 had other genital infections and 164 did not require treatment.

Tables showing the incidence of early syphilis and gonorrhoea and the number of new registrations and attendances at the Special Treatment Centre in Bradford from 1946 to 1970 are included in the Appendix."

Tuberculosis

The decline in the number of cases of tuberculosis (all forms) in the indigenous population continues and the current notification rate (in the indigenous population) compares favourably with the rates for other industrial cities.

In 1957, 300 cases of tuberculosis in the indigenous population were notified, and in 1970, only 75. By comparison, 30 cases in Asians were notified in 1957, and 178 in 1970.

The Asian contribution to the tuberculosis figures in Bradford however, gives us currently a notification rate of about 0.86 per thousand (all forms).

A comparable figure for England and Wales is in the order of 0.35. Thus we have a rate that is almost two and a half times greater than that for the nation as a whole.

This Department's figures have always differed slightly from those of the Chest Clinic. The Clinic deals with a small number of patients from outside

the City boundary, whereas Departmental figures relate only to Bradford cases. In addition, a few cases of pulmonary tuberculosis are treated wholly by the paediatricians, the orthopaedic surgeons or the Consultant in Infectious Diseases (as distinct from the Consultant Chest Physician at the Chest Clinic).

In the Annual Report for 1969, concern was expressed that an appreciable number of cases of non-pulmonary disease were not being notified. In the absence of bovine tuberculosis in this country it was considered that we should screen the contacts of all such cases in an effort to find the source of infection. Dr. W. M. Edgar, Consultant Pathologist, assumed the responsibility of notifying to us all cases of non-pulmonary diseases discovered by histology or culture from specimens submitted by his clinical colleagues. We are grateful to him for his co-operation. Some overlapping occurs—a few cases notified by Dr. Edgar are notified again by Dr. D. K. Stevenson, the Consultant Chest Physician. In very many cases, however, specimens examined by Dr. Edgar are from patients seen initially by the surgeons rather than the physicians, and many cases of non-pulmonary disease are not entered in the Chest Clinic registers. Thus in 1970, the Chest Clinic recorded 68 cases of non-pulmonary tuberculosis, and this Department recorded 112.

Many persons of course are seen and treated at the Chest Clinic for conditions and diseases other than tuberculosis. Nevertheless, it would make for an easier administration if the Chest Clinic were also the 'Tuberculosis' Clinic, and recorded *all* cases of tuberculosis—the more so because screening of contacts of cases of non-pulmonary tuberculosis is in the hands of the health visitors, who are employed by the Health Department but based at the Chest Clinic.

The table below, derived from Chest Clinic figures, gives the number of cases notified as suffering from tuberculosis; Asians and non-Asians by sex. The year 1957 was the first year in which cases of tuberculosis in Asians began to influence materially the total number of cases notified in a year.

NUMBER OF CASES NOTIFIED AS SUFFERING FROM TUBERCULOSIS
1957 — 1970

	Non-Asians				Asians				Full Total
	Men	Women	Children	Total	Men	Women	Children	Total	
1957	159	110	31	300	26	3	1	30	330
1958	147	92	20	259	67	4	—	71	330
1959	120	59	16	195	82	2	5	89	284
1960	118	66	17	201	61	3	2	66	267
1961	110	56	20	186	124	2	1	127	313
1962	83	47	9	139	209	6	4	219	358
1963	88	49	13	150	189	9	5	203	353
1964	94	38	6	138	168	17	15	200	338
1965	50	34	6	90	131	22	12	165	255
1966	51	25	15	91	105	36	16	157	248
1967	38	25	2	63	88	41	14	143	206
1968	56	25	4	85	105	44	18	167	252
1969	39	26	6	71	123	83	17	223	294
1970	58	16	1	75	105	60	13	178	253
Total	1,212	668	166	2,043	1,583	332	123	2,038	4,081

It will be seen that in the 14 years, 2,043 cases have been notified in the non-Asian populations, and 2,038 in the Asian population. The non-Asian

population is not wholly indigenous—some West Indians, Africans and other coloured persons are included under ‘non-Asian’, but the incidence of tuberculosis in these groups is not greater than in the truly indigenous population.

In 1970, the Asian population of Bradford was estimated to be 9.6 per cent of the total population, and Asians gave rise to 70 per cent of all cases of tuberculosis.

The Chest Clinic figure of 253 cases of tuberculosis in 1970 is further broken down into pulmonary and non-pulmonary disease among non-Asians and Asian population as follows:

	Non-Asians				Asians				Full Total
	Men	Women	Children	Total	Men	Women	Children	Total	
Pulmonary	55	13	1	69	73	33	10	116	185
Non-pulmonary	3	3	—	6	32	27	3	62	68
Total	58	16	1	75	105	60	13	178	253

As stated above, in 1970 this Department recorded 44 cases of non-pulmonary disease that were not recorded at the Chest Clinic, and 80 per cent of these were in Asians. In slightly less than half of these cases in Asians, the site of the infection was in neck glands.

In the Annual Report for 1969 we expressed our concern at the continuing high annual number of notifications of tuberculosis, but noted that an increasing number of the notifications of pulmonary disease were of early non-infectious disease in which the response to treatment was good.

Some cases of tuberculosis, of course, stay on the register for many years. That cases are increasingly responding to modern chemotherapy (particularly when detected early) is demonstrated by the following table which shows that fewer first visits are being made each year to tuberculous households—i.e. the number of old cases carried forward to be added to new cases diminishes each year.

	1968	1969	1970
No. of first visits to old and new cases of tuberculosis	1,361	1,172	994
No. of subsequent visits to old and new cases of tuberculosis	2,153	1,984	2,045
Total	3,514	3,156	3,039

Infectious and Other Diseases in Immigrants

The type of infectious disease that is imported is one which is frequently the subject of much misunderstanding and misrepresentation. This is due to the anxieties of the host community that there are increased risks of infection to the indigenous population associated with immigration. This is not the case. Most imported disease is not transmissible in temperate climates, and where water supplies and sewerage are of a high standard, and there is no evidence of spread of any contagious illness from immigrant to host community in the City.

Over the years it has been established that morbidity from the more common infectious diseases of childhood (dysentery, measles, whooping cough, etc.) is not greater in Asian immigrants than in the indigenous population.

We have noted earlier in this Chapter that for several years, each year on average, we have been notified of three cases of leprosy, five cases of malaria, and nine cases of enteric fever, and that the majority of the patients were Asian immigrants.

Dr. Oller has noted earlier in this Chapter that of 404 new cases of gonorrhoea in males seen at his Clinic in 1970, 41 per cent of the patients were U.K. born, 33 per cent were Asians, 23 per cent West Indians and three per cent "others".

All immigrant children are screened prior to admission to school, and this work has been described in previous Reports. The percentage of children (new arrivals) found to have helminth infection does not vary much from year to year. The majority of children thus infected respond readily to treatment, and helminths have not been a major problem of public health.

Tuberculosis in the Asian however, does continue to pose problems partly because of the particular susceptibility which they appear to have to this infection, and partly because of the way in which the disease presents in them. Even with this disease, no case has yet come to light where a locally born resident acquired tuberculosis from an immigrant.

Nevertheless, as long as tuberculosis exists in the community it is a potential risk to others and the department must continue its strenuous efforts to eradicate the disease.

In the early 1950's, when immigrants from Asia began to arrive in Bradford, several chest X-ray sessions were organised for them. In spite of great attention given to advertising the sessions, and considerable effort by the staff of this Department, the sessions were failures in that few attended. We concluded that we did not have the confidence of the Asian community.

The services subsequently started in the following years in an attempt to bring tuberculosis in immigrants under control have been fully described in previous Annual Reports.

Today in general terms we receive full co-operation from the Asian community, and for this we are grateful. When cases of tuberculosis were discovered in some of the first Asian immigrants to Bradford, the patients demonstrated a considerable apathy towards their own ill-health. They were reluctant to go into hospital or to attend as out-patients for treatment. If they could, they would go on working perhaps on the night shift in 'combing' in the textile trade. At all costs they would earn money, even at the expense of their deteriorating health. With time, however, they realised that they did not *have* to die and that acquaintances after hospital treatment were returning to work in good health. Treatment became more readily accepted, and an increased co-operation with the local health and hospital services was apparent.

We have no accurate knowledge of the numbers, by race, of immigrants in Bradford. We believe that there are some 30,000 coloured persons in Bradford—perhaps 27,000 Asians and 3,000 West Indians and Africans. The figure of 27,000 Asians includes 7,200 Asian or half-Asian children born here. In the Asians, the ratio of Pakistani to Indian is about 3 : 1.

Initially, the Pakistani immigrants were nearly all males—groups of friends, ‘cousins’, fathers with sons, etc.—whereas the Indians tended to come as family units of man, wife and child(ren).

In latter years, particularly since the requirement of work permits under the Commonwealth Immigrants Act the pattern has changed. We now receive a preponderance of Pakistani women with their children—coming as dependant relatives to join their husbands.

Advice notes are sent to us each week of the arrival of immigrants at the air and sea ports, where the immigrant has stated his destination as Bradford.

In the period January, 1968 to December, 1970, 5,106 advice notes were received. These have been analysed as follows:

			Adults		Children	Total
			Males	Females		
Pakistani	...	...	188	1,413	1,850	3,451
Ratio	...	...	1	7.5	9.8	
Indian	...	...	200	451	439	1,090
Ratio	...	...	1	2.3	2.3	
Kenyan Asian	...	...	67	70	143	280
Ratio	...	...	1	1.0	2.1	
West Indian	...	...	15	40	103	158
Ratio	...	...	1	2.7	7.0	
“Others”	...	...	51	60	33	142
(from 25 different nations)						

5,106

A total of 4,821 (94.4 per cent) of the immigrants were either Pakistani, Indian or Kenyan Asian.

It is vital, of course, that we should screen immigrants, particularly Asians, as soon as possible after arrival.

We were dismayed, therefore, in mid-1970 to receive advice notes up to one month after the arrival of immigrants at Heathrow. The explanation, we were told, was that in spite of daily arrivals of large numbers of Asian immigrants, the Airport (the ‘port health authority’) had the services only of a part-time radiologist; that when he was on leave there was no deputy, and that advice notes were with-held until the X-ray films were read. We are pleased that the position is very much improved, and that advice notes are received weekly.

It is imperative that advice notes be sent to us immediately for obvious reasons. It is our aim to screen every immigrant, irrespective of his recent medical examinations, if any. X-ray readings from the port of entry are, of course, extremely helpful, and an urgent advice from Heathrow has on more than one occasion resulted in a newly arrived immigrant being diagnosed as having active tuberculosis and being hospitalised within 24 hours of arrival.

After the receipt of an advice note, the new arrival is invited to a screening clinic at the premises housing the static unit of the Mass Radiography Service. There the immigrant is Heaf-tested, given B.C.G. vaccine, if necessary, by the S.M.O. (Epidemiology) of this Department, or

X-rayed by the Regional Hospital Board staff as required. If the small film is 'suspicious', the immigrant is recalled for a large film, examined by the Medical Director of the Unit, and referred to the Chest Clinic if necessary.

The invitation to the immigrant to attend was originally a letter in English, with translations in Urdu, Bengali, Gujrati and Gurmukhi. At the present time the letter is in English and Urdu only. The letters were originally posted, many were returned "gone away" or "not known", depending of course on the interval between arrival in Bradford and the sending of the invitation. It was discovered that some immigrants stated at the airport an address in Bradford which was only an accomodation address, the home of a friendly 'cousin' and that within days the immigrant and his family had moved on. Our 'unimportant' letters were not forwarded. Because of this, we have latterly changed the routine, and the invitation to attend the screening clinic is now given by hand to the immigrant by the Asian Liasion Officer.

A typical advice note today gives the name and address of a Pakistani woman, her age, date of arrival, the address to which she is proceeding, the country of origin, a note that she has been X-rayed at Heathrow and that the result is no abnormality and that she was accompanied by three children, not X-rayed. The A.L.O. at his visits ascertains the date of birth, name and sex of each child, and so within days of arrival, the children are recorded. The mother is invited to attend the screening clinic with her children. All are skin tested and given B.C.G. or X-rayed as required. Physically small children who cannot be X-rayed at the Unit because of radiation hazard are referred to the Chest Clinic for X-ray.

Many of the newly arrived Asian women accept the invitation to attend, with their children. An interesting fact is that often the husband who has been in Bradford for perhaps two or three years, and who has not accepted our previous invitation to attend, comes with his wife and children, as "guide and protector".

This is illustrated by the fact that during 1970, the 904 adult Asian immigrants screened were almost equally divided as to sex (443 males and 461 females), but that of the total, the number of persons screened within two months of arrival in the United Kingdom consisted of only 46 males and 196 females.

Dr. J. S. Dodge, a former S.M.O. (Epidemiology) in this Department, had estimated that in the peak years of notification of pulmonary tuberculosis in Asian males (1962 and 1963), about 40 per cent were imported cases and in the remaining 60 per cent the disease had apparently been acquired in this country.

In this connection it was decided latterly to analyse the record cards of all Asian immigrants over the age of 16 years who had been screened in the period January, 1968 to December, 1970. The number tested was 3,640, and seven per cent of the men and 14.8 per cent of the women were negative reactors to the skin test. In this exercise 'negativity' was not correlated with length of stay in U.K.

The cards in respect of the 904 adult Asian immigrants screened in 1970 were then processed—degree of positivity being measured against length of

stay in U.K. This revealed that 26 per cent of newly arrived males (in U.K. less than 2 months) and 21 per cent of newly arrived adult females were negative reactors.

During 1970, 840 immigrant children were screened at the Manor Row (School) Clinic prior to entry to school. Many of the children had been previously screened, as described earlier in this Chapter, soon after arrival. A duplication of effort to screen the children as early as possible is not wasted, and only on rare occasions has a child been admitted to school without prior screening.

It would seem that about 25 per cent of newly arrived adults, and 50 per cent of newly arrived children are negative reactors to the skin test. The latter figure compares with about 12 per cent in indigenous children of comparable age groups.

Several years ago an arrangement was made with the Bradford Executive Council whereby cards, supplied blank by this Department, are completed as to name, address, sex, age and family doctor and returned to us in respect of each immigrant when he registers with a local general practitioner.

An invitation is then sent to the immigrant to attend the screening clinic with a request that if he has previously attended he will state where and when on the letter and return it to us.

This system has worked well—it gives a boost to our efforts to ensure that every newly arrived Asian is screened, and enables us to offer screening facilities to an immigrant who has come to Bradford, say, after a few months in another town, and in respect of whom an advice note would not normally be received.

Prevention and Early Detection of Disease

Vaccination and Immunisation

The computer recording system for vaccination and immunisation has been fully described in previous Reports.

The system continues to work well, even though we still receive cards from doctors wrongly or inadequately filled in. Each card is carefully checked, and corrected as necessary by hand, by the staff of the Vaccination and Immunisation Office at Edmund Street Clinic before being sent to the City Treasury computer staff for punching. The checking is very time-absorbing, but the system would rapidly fall down if we relied upon the accuracy of the cards as returned.

The computer master record covers children up to the age of six years. Diphtheria/tetanus and oral polio re-inforcement, described as being given at 'school entry', are in fact given at the first school medical examination, within the first few months of a child being admitted to school at five years. Our aim is to give maximum possible protection to children before the age of six—leaving for later years only B.C.G. vaccination, immunisation against rubella (for girls) and polio and tetanus re-inforcement for school leavers.

Table 32 in the Appendix gives full details of children under 16 given primary courses and re-inforcing doses of the following vaccines during 1970:

Triple (diphtheria, pertussis, tetanus)
Diphtheria/tetanus
Diphtheria
Tetanus
Oral poliomyelitis
Measles
Rubella

The following is the schedule we now recommend:

Age	Vaccine(s)
6 months	First dose triple (diphtheria, whooping cough, tetanus) First dose oral polio
8 months	Second dose triple Second dose polio
12 months	Third dose triple Third dose polio
13 months	Measles
15 months	Smallpox
School Entry	Diphtheria/tetanus re-inforcement Oral polio re-inforcement Smallpox re-vaccination
10 years	B.C.G. (tuberculosis)
11 years (girls)	Rubella
School Leavers	Oral polio re-inforcement Tetanus re-inforcement Smallpox re-vaccination

B.C.G. Vaccine

It will be seen from the schedule that this vaccine is recommended for children when they become 10 years old. This is the current recommendation for indigenous children. Because of the high incidence of tuberculosis amongst Asian immigrants, as previously described, Asian children are skin tested and given B.C.G. as appropriate at school entry at five, or at any age (5—15) if newly arrived. A parent taking a child aged five for screening prior to admission to school may take also some children of pre-school age. These are skin tested and where necessary, given B.C.G. in readiness for future admission to school, or earlier admission to a day nursery or nursery school.

During 1970, 1,150 immigrant children were skin tested; as a result, 576 were given B.C.G. vaccination.

It is our policy to give B.C.G. to all Asian babies during the first few months of life. During 1970, 1,692 children under five years were given B.C.G., and 1,452 were under four months old. Most of the children under five were Asians, but the number includes some indigenous children dealt with as contacts of cases of tuberculosis.

Immunisation against Measles

We had hoped that after the intensive immunisation programme in 1968 had secured protection for the greater part of the eligible school-child

population, and after pre-school children had been immunised, and babies were being immunised routinely at 13 months, we should see marked diminution in the incidence of measles. As reported earlier in this Chapter, there were 2,640 cases of measles in 1970, compared with only 91 in 1969.

The age distribution of the 2,640 cases in 1970 was as follows:

Under 1	1-2	2-3	3-4	4-5	5-9	10-14	15-24	Age Unknown
172	310	341	393	382	939	22	4	77

The age groups immunised against measles during 1970 were as follows:

Under 1	1-2	2-3	3-4	4-7	Others under 16	Total
87	2,995	721	418	502	46	4,769

It is interesting to note that although the recommended age for immunisation against measles is 13 months, 172 babies under one year suffered from the disease.

An unknown number of school-children and certainly a considerable number of children aged two to five years have not had the disease nor have they been immunised. In Bradford over 5,500 babies reach the age of 13 months each year. If we can immunise the majority of these babies the problem of measles should be solved, as the reservoirs of infection in schools diminish each year.

Immunisation against Rubella (German measles)

Immunisation against rubella was started in 1970 towards the end of the year. We offered immunisation to 13-year-old girls in pursuance of the policy of giving protection to them before they reach theoretical child bearing age. Next year and in successive years the vaccine will be offered to girls aged 11-13 years.

During 1970 the total immunised was 1,014.

The scheme was tedious in the beginning. Letters with consent forms were sent out to parents of eligible girls via schools. The percentage of consents was disappointing, and we were convinced that many of the letters never reached home. Further, vaccine was issued to us in small amounts over many months, and for a long time we could not accumulate a stock large enough to make a worthwhile start. It is not possible in a large city to have medical officers going round and round schools each month immunising children as they reach a critical age. For obvious reasons as large a group as possible must be immunised at one session.

Next year, and in future, we propose to post an invitation and consent form to parents of eligible girls, and enclosing a pre-paid reply envelope. It will be interesting to see if the percentage acceptance is materially increased.

Vaccination against Smallpox

There were no cases of generalised vaccinia or post-vaccinial encephalitis, or of other complications of vaccination during the year.

The following vaccinations were given:

	Approximate age groups					Total
	Under 1	1 year	2-4 years	5-15 years	Older persons	
Primary vaccination	55	1,755	417	121	210	2,558
Revaccination	—	—	24	103	1,298	1,325

Vaccination and Immunisation for International Travel

In addition to primary smallpox vaccination and re-vaccination included in the above, the following immunisations were given during the year to persons travelling abroad:

Antigen/ vaccine	Injection	By local authority medical officers	By general practitioners, hospital doctors, etc.	Total
Cholera	1	4	275	279
	2	75	98	173
	3 (booster)	29	—	29
T.A.B.	1	3	201	204
	2	30	74	104
	3 (booster)	13	—	13
Cholera and T.A.B. combined	1	—	30	30
	2	—	8	8
T.A.B. and Tetanus combined	1	1	106	107
	2	6	34	40
	3 (booster)	6	—	6
Typhus	1	—	—	—
	2	2	—	2
Yellow fever	1	497	N.A.	497
	Totals	666	826	1,492

Of the 666 persons vaccinated by local authority medical officers, 242 were Bradford residents, and 424 lived outside the City. Of the 424, 346 received yellow fever vaccination—Bradford being one of the limited number of Centres throughout the country for this vaccination.

Immunisation against Cholera

In addition to the 108 cholera injections listed in the previous table (by local authority medical officers), some 430 injections were given at Central House by the Senior Medical Officer (Epidemiology). This was because of the acute shortage of vaccine following the spread of cholera to the Near East in late 1970.

Single vials (1.5 ml. i.e. one dose each of 0.5 and 1 ml.) were unobtainable, but the Department acquired some 25 ml. bottles and undertook, for the time being, the vaccination of persons proceeding to the endemic areas and the new locally infected areas, on behalf of the general practitioners, until the vaccine became more freely available.

Anthrax Vaccination

The Department continues to assist some firms by the vaccination of persons at risk to anthrax infection. It is regretted that there is still a certain amount of apathy in some quarters to vaccination against this disease, particularly as the vaccine is safe and effective.

Protection against anthrax is secured by a first injection, a second after three weeks, a third after three weeks, a fourth after six months and thereafter a re-inforcing dose annually.

During 1970, 83 injections were given to 72 persons.

Mass Radiography

We are indebted to Dr. J. B. Deasy, Medical Director of the Bradford Mass Radiography Service for the following report:

"During 1970, 30,858 persons were examined by this Service in the City of Bradford; 14,963 attended at the Mobile Unit at various sites in the City, and 15,895 at the Chest X-ray Centre at Rawson Road. This was 700 more than the total examined in the City in 1969, and is the highest number ever examined in one year in Bradford by the M.M.R. Service. Altogether 120 persons were found in these surveys to be suffering from pulmonary tuberculosis requiring treatment (88 men and 32 women). Of this total of cases found, 87 were Asian immigrants residing in the City (72.5 per cent of the total). The number of persons referred to the Static Unit by the general practitioners for exclusion chest X-ray was 7,629, and this group produced the majority of the cases of tuberculosis—63 out of 120.

Attendances at the Static Unit were very much augmented in the early months of 1970 by the effects of the influenza epidemic which developed in December, 1969. The value of the G.P. exclusion chest X-ray service was particularly demonstrated at this time when a considerable number of patients were found to be suffering from non-specific chest infections. Attendances at the Monday sessions at Rawson Road Chest X-ray Centre during the epidemic were far beyond the capacity of any hospital X-ray department, and only M.M.R. technique and expertise could cope with the problem. An increase in the incidence of tuberculosis infection was also apparent in the months immediately following this epidemic. The incidence of pulmonary tuberculosis in the indigenous population showed a slight rise from 1.5 per 1,000 examined in 1969 to 1.6 per 1,000 in 1970 (33 cases in 21,192 examined), and almost all of these cases returned a positive result for M. Tuberculosis on initial testing of secretions.

Of special interest is the tuberculin testing survey which is undertaken by Bradford Health Department personnel at the Chest X-ray Centre on Monday each week. This survey is directed towards the immigrant community who are invited by personal letter to attend for chest X-ray and Heaf tuberculin test. Negative reactors to the test are offered B.C.G. vaccination and strongly positive reactors with negative X-ray findings are given follow-up appointments to attend for further X-ray within four to six months. Review of the past four years of this survey gives the following table:

	Number Examined	Cases of Tuberculosis requiring treatment revealed	Incidence per 1,000 examined
1967	1,198	13	10.9
1968	1,635	15	9.2
1969	2,530	23	9.1
1970	2,037	31	15.2

It is thus apparent that this survey is proving increasingly productive and it is of considerable significance that nine of the 31 cases of tuberculosis found by this survey in 1970 were re-attenders who had a previous clear chest X-ray at their first attendance. The scheme was extended to invite especially teenage immigrants who were separated from one or both parents (who had returned to Pakistan in most cases) and three young people in this group were found to be suffering from tuberculosis requiring treatment. Also invited were post-natal Asian women from four to six months after delivery at the Bradford Maternity Hospitals, and four of these women were found to have developed tuberculosis requiring treatment since they had previously had a routine ante-natal chest X-ray. Of the 31 cases of tuberculosis found in this survey, 19 were reckoned to be suffering their primary infection and the remaining 12 had progressive post-primary disease: all 31 were given anti-tuberculous drug treatment. There is no doubt that this survey is a most worthwhile undertaking which should be encouraged and developed with even wider application so that all immigrants resident in or entering the City could be invited to take part in the scheme to their own advantage.

In conclusion I wish to thank the Bradford Medical Officer of Health and his staff for the co-operation and support which his Department has shown this Service over several years, and I trust that we in this Service may be permitted to continue to fulfil our role in the prevention of chest infection in Bradford."

Screening for Cancer of the Cervix and Breast

This aspect of prevention and early detection of disease is described in Chapter 1 (Maternity Services).

Surveillance of Persons from Smallpox and Cholera Areas

The surveillance of all persons arriving in the United Kingdom without valid certificates of vaccination against smallpox or cholera, from areas in which these diseases are endemic, or from locally infected areas, has been continued.

Great care is taken in the examination of International Certificates as it is not unknown for them to be forgeries, complete with 'authentic' rubber stamps but fortunately printed in 'fractured' English.

Non-Infectious Diseases

Heart Disease

Heart disease continues to be the greatest single cause of death in the City and this is in accordance with the general experience in the United Kingdom.

The following table shows the distribution of deaths from ischaemic heart disease in Bradford in 1970:

Age Group	1-4	5-24	25-34	35-44	45-54	55-64	65-74	75+
Males	—	1	1	24	60	133	183	150
Females	—	—	1	2	11	46	139	298

Cancer

There were 706 deaths from cancer during the year (370 males and 336 females). They were distributed as follows:

malignant neoplasm—	Males	Females	Total
buccal cavity	8	2	10
oesophagus	9	7	16
stomach	43	41	84
intestine	37	65	102
larynx	3	1	4
lung bronchus	152	34	186
breast	—	52	52
uterus	—	31	31
prostate	19	—	19
others	86	86	172
leukaemia	9	10	19
benign and unspecified neoplasms	4	7	11

Accidental Deaths and Suicides

There were 22 deaths due to accidents in the home and 43 deaths due to motor vehicle accidents during the year. In addition there were 11 deaths from suicide. The age distribution was as follows:

Home Accidents

	0-1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total
Fall	—	1	—	—	—	—	2	—	2	4	9
Poisoning											
coal gas	—	—	—	—	—	1	—	—	—	1	2
barbiturate	—	—	—	—	2	1	1	1	—	—	5
Asphyxia	—	1	—	—	—	—	—	—	—	—	1
Fire	—	—	—	—	1	—	—	—	2	1	4
Electrocution	—	—	—	—	—	—	1	—	—	—	1
Total	—	2	—	—	3	2	4	1	4	6	22

Suicide

Poisoning											
carbon											
monoxide	—	—	—	—	—	—	—	—	—	1	1
coal gas	—	—	—	—	—	—	—	—	1	—	1
coal gas and											
barbiturate	—	—	—	—	1	—	—	—	—	—	1
barbiturate	—	—	—	1	1	2	1	—	—	—	5
Asphyxia	—	—	—	—	—	1	—	—	1	—	2
Fire	—	—	—	—	—	—	1	—	—	—	1
Total	—	—	—	1	2	3	2	—	2	1	11

Motor Vehicle Accidents

—	1	3	13	5	5	2	4	7	3	43
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ENVIRONMENTAL HYGIENE**District Inspectors**

The duties of the inspectors cover a wide field of environmental hygiene, and include the investigation of complaints about public health and housing matters, the inspection of premises and the supervision of repairs and improvements to buildings and houses.

During the year, 3,370 complaints were received and investigated. In many cases the service of a statutory notice under the Public Health Acts was necessary but a large number of them were only in connection with minor items of disrepair.

Due to the regular visitation by a member of the staff no serious overcrowding took place in the many houses let in multiple occupation and occupied mainly by male Pakistani immigrants, and it was found necessary to serve only one notice under Section 90 of the Housing Act, 1957.

One hundred and twenty-two notices were served under Sections 15 and 16 of the Housing Act, 1961 on persons in control of houses let in multiple occupation.

There were 10 exhumations during the year. The remains were exhumed owing to new road and building developments taking place.

Towards the end of the year there was an influx of work connected with the issue of Qualification Certificates under the Housing Act, 1969 and this involved an increasing number of inspections.

Common Lodging Houses

There are two common lodging houses in the City, both of which are in the control of the Salvation Army. These establishments, containing seven sleeping rooms, were inspected on 12 occasions during the year.

The total number of persons accommodated during the year was 44,550 (37,141 in 1969). The nightly average was 122, representing 77 per cent. of the 158 beds available.

Hygiene in Factories and for Building Operatives

At the year end there were 2,117 factories in the register which is kept by the Council under Section 8 (5) of the Factories Act, 1961. This figure consists of 1,992 power factories, 85 non-power factories and 40 other premises (mainly building sites). The Act also makes the Authority responsible for enforcing the provision of adequate sanitary accommodation for building operatives.

Outworkers

As the register of outworkers included 50 persons who live outside the City it was necessary to send details to 22 other local authorities.

The total number of outworkers notified was 233—textile (burling and mending) 177, and wearing apparel 56.

Offices, Shops and Railway Premises Act, 1963

Routine inspections of premises were continued. These involved newly registered premises and existing premises which had been inspected in the years immediately following the coming into operation of the Act.

The Offices, Shops and Railway Premises (Hoists and Lifts) Regulations, 1968 were operative for the whole of the year.

The requirements of these Regulations are similar to those governing lifts and hoists in premises which are subject to the Factories Act. This is another step in the attempt to bring the safety, health and welfare conditions for sedentary workers into line with those already enjoyed by employed persons who are covered by the Factories Act.

One of the main requirements of the Regulations is that all lifts and hoists must be examined every six months and, if found to be defective in any way, a copy of the report stating the nature of the defects must be sent to the Local Authority. It is then the duty of the Local Authority to see that the necessary works are carried out by the persons responsible so as to make the lift or hoist comply in all respects with the Regulations.

During 1970, 16 lifts were referred to the Local Authority, the further use of which without alteration or repair would have constituted a danger to those persons using them. The risk of injury in the majority of cases was slight, because although many of the defects required renewal of suspension ropes it was clear that in no case was any immediate disaster envisaged.

The enclosure of liftways gave rise to some controversy. It is clear that in order to prevent persons coming into contact with any moving part of a lift complete enclosure with either solid or fine-mesh material is necessary. It has not always been easy to convince persons faced with a potentially formidable reconstruction bill that the possibility of climbing over a six feet high partially protective barrier by persons of mischievous disposition must be guarded against. There has been some lack of uniformity by lift engineers when this aspect of the Regulations has been reported upon.

A further dilemma exists where the cost involved to bring an old lift into compliance with the Regulations is so high as to persuade those concerned that a completely new lift system is the best proposition. This latter course of action usually involves a substantial delay and, in this area, temporary measures to render the old lift safe can often be very expensive. With new lifts in prospect there is often resistance to this expenditure.

It can generally be said that, so far as this Authority is concerned, the people involved appear to appreciate that accidents in connection with hoists and lifts would tend to be very serious, and very little outright opposition has been encountered.

Worthy of note is a circumstance in which compliance with the law brought greater danger than its contravention. An open platform power-operated hoist, working between the ground floor and the first floor of a wholesale food warehouse, was noted by an inspector making a routine visit.

There was no enclosure whatsoever—the whole affair would have been swinging free, except for two thin guide wires passing through the platform which served to stabilise it to some extent. Persons passed to and fro beneath it as goods were being conveyed up and down. Competent lift engineers had refused to have anything to do with it, and no inspection had been made under the Act.

If *no* guide wires had been provided, the danger would have been greater, but the hoist would not have been caught by the Regulations.

In the event, on the urgent representations of the Department, the contraption was taken out of use.

Accidents

During the year 116 accidents were reported of which five were investigated and the appropriate advice given. There were no fatal accidents.

Although the number of accidents notified has increased over the previous year, the vast majority of injuries received were of a minor nature and were in no way the result of contraventions of the Act by the employers concerned. A large proportion of the accidents notified were in fact from three large mail order firms whose health and welfare standards for employees is far in excess of that demanded by legislation.

On all visits to premises and in discussions generally with employers the opportunity is always taken to remind them of their obligation to report accidents under Section 48 of the Act.

Accidents were reported as follows:—

1. Offices	...	...	...	...	...	24
2. Retail shops	...	...	...	...	...	19
3. Wholesale shops and warehouses	...	...	...	...	...	48
4. Catering establishments and canteens	...	...	...	...	...	25

It was not found necessary to institute legal proceedings during the year. The work required to be carried out was, in all cases, completed by the persons responsible either by verbal agreement or after a warning letter had been sent.

Rag Flock and Other Filling Materials Act, 1951

There were 14 registered premises in the City, and 40 visits were made. Twenty-three formal samples were taken during the year.

Current Regulations made under the Act are dated 1961 and 1965, and since they were made new kinds of filling materials have come more and more into use, testing techniques have been refined, and testing charges have become out of date. Additions to the list of prescribed materials, incorporated in new Regulations, are in prospect. These additional materials are:—

1. Bonded cellulose acetate fibres
2. Rubberised hair and fibre
3. Rubberised or resin-bonded felt
4. Cellular rubber and cellular plastics crumb

and types of wood fillings other than the already prescribed wood wool. The new Regulations, including increased testing fees, have been drafted, and are expected to become operative in the near future.

Hairdressers and Barbers

(Bradford Corporation Act, 1949, Section 28)

The Act requires that every person carrying on the trade or business of a hairdresser or barber shall be registered with the Corporation. Byelaws have been made under this Section which require the cleanliness of premises, instruments, towels and equipment.

Where persons are employed, opportunity was taken to combine visits under this Act with visits under the Offices, Shops and Railway Premises Act, 1963, and where self-employed persons only were concerned separate visits were made at intervals. All premises were inspected on initial registration.

At the end of the year there were 360 premises on the register and 94 visits were made to them. Six minor contraventions were rectified without delay.

Smoke Abatement

The North-West Smoke Control Order which was confirmed in September, 1969, and becomes operative on the 1st May, 1972, continued to make steady progress during the year. Since the difficulties arose with regard to solid fuel, estimates submitted for proposed conversions have tended to show a remarkable increase in the choice of gas-fired appliances. The operative date of the Order is such that it is thought that the shortage of solid fuel will have been rectified and no difficulties are envisaged in bringing another large area of the City into the completed part of the smoke control programme.

A new area known as the City of Bradford (Bradford Moor) Smoke Control Order, 1971 was prepared during the year and will be submitted to the Council in early 1971. This new area contains approximately 7,000 dwellings and covers 718 acres.

During the year 68 complaints were received and investigated in connection with smoke and nine in connection with grit emissions. Improvements were effected in every case.

There were 1,170 observations made of industrial chimneys and 547 visits to premises in connection with smoke abatement. As a result of investigations five formal and 89 informal notices were served on the offending persons. Arising from the observations and visits many improvements were made to boiler plants, etc. Thirty-one applications for prior approval of such plants were considered under the Clean Air Acts, 1956 and 1968.

Measurement of Atmospheric Pollution and Deposit Gauges

During the year measurements from these stations were discontinued.

Housing

The results of the West Riding Conurbation House Condition Survey and the surveys undertaken by the Council's own public health inspectors into the older housing areas of the City have stressed the need for even further efforts to demolish the decayed or decaying areas and to encourage the improvement of worthwhile properties and their environments as quickly as is possible.

Accordingly, the clearance programme is being reassessed and a programme of General Improvement Areas is being prepared. House Improvement has been the subject of publicity campaigns allied to show houses and exhibitions, and it is hoped to hold a House Improvement Month in conjunction with the Department of the Environment in the forthcoming year.

Slum Clearance

The representation of houses in clearance areas and dealt with by clearance order and compulsory purchase order has continued and 1,273 houses have been dealt with. One hundred and fifty houses have been represented as being individually unfit for habitation, and thus a total of 1,423 houses has been condemned.

Only 474 families have been rehoused by the Corporation, 1,223 houses have been demolished and 35 closed as being unfit for habitation. Twenty-six clearance areas have been declared and included in 19 compulsory purchase orders. Four areas have been dealt with by purchase or by an informal agreement to demolish.

Public Inquiries were held into 10 orders and confirmation of 20 orders was received; eight sites were cleared and made available for redevelopment.

Since 1945, 19,123 houses have been represented, 15,133 houses demolished and 1,210 closed.

Families suffering hardship have been assisted by a contribution to, or the payment of, removal expenses and ex-gratia payments have been made to shopkeepers occupying affected premises on a short term basis when no other compensation was payable.

	No. of Houses Represented		No. of Houses closed or demolished	
	In Clearance Areas (Clearance Orders and Compulsory Purchase Orders)	Individually Unfit (for closure or demolition including informal action and L.A. Houses)	Closed	Demolished
1945	—	26	4	16
1946	—	98	18	265
1947	—	200	26	50
1948	—	77	27	53
1949	—	111	37	35
1950	23	65	33	43
1951	30	57	35	42
1952	—	60	29	43
1953	—	103	37	67
1954	245	171	76	101

1955	603	208	88	124
1956	72	201	79	436
1957	822	195	58	435
1958	974	149	63	663
1959	1,219	135	51	662
1960	1,427	159	57	999
1961	1,106	119	32	1,415
1962	1,290	198	85	1,355
1963	645	196	64	712
1964	970	141	60	1,075
1965	805	151	33	890
1966	931	211	40	1,085
1967	802	154	28	1,711
1968	836	192	73	760
1969	1,435	88	42	882
1970	1,273	150	25	1,214
Total	15,508	3,615	1,210	15,133

Improvement Grants

A total of 1,569 applications for grant assistance were received and investigated. Seven hundred and sixty-eight Standard Grants and 155 Improvement Grants were approved; a total of 923 houses. Improvement works were completed and payments made thus:—

Dwellings	Amounts
657 Standard Grants	£102,493
104 Improvement Grants	14,992
<hr/> 761	<hr/> £117,485
1 Special Grant	£530

Since the improvement grant legislation was introduced in 1952, 2,176 improvement or discretionary grants have been approved, and since the introduction of the standard grants in 1959, 9,494 such grants have been approved—a total of 11,670 dwellings. Twelve applications have been received for special grants and five have been approved. Loans secured by mortgage are available to applicants for grant assistance and the scheme has been drafted in the most generous terms possible within the legislation. Two hundred and fifty-one applications were received and 95 completed. Thus since 1966, 951 applications have been received and 371 completed.

General Improvement Areas

Two improvement areas containing a total of 2,302 houses have been declared in accordance with the Housing Act, 1969.

The Longlands scheme involves 127 Council dwellings which are subject to a complete renovation and modernisation scheme. The area improvement proposals include the landscaping of areas within the curtilage of the properties, alterations to street lines and the extinguishment of a street in order to remove through traffic and provide further land for landscaping purposes.

The Barkerend scheme includes 2,175 houses, all in private ownership, and has been sub-divided into seven sections for the purposes of administration. Already 66 per cent. of the houses have been improved to at least

standard grant level. The owners and occupiers of these houses are being encouraged to carry out further improvements at the same time as the owners of unimproved properties are being persuaded to modernise.

Environment improvements are being designed on the basis that the Council will spend the sum of £100 per dwelling and thus give each area as a whole a life of thirty years.

This latter scheme is a pilot project which will enable the Council to determine its policy for the numerous similar areas in the City.

Public meetings and exhibitions have been held and have had enthusiastic support from the public.

Rent Act, 1968

No applications for Certificates of Disrepair were received.

Housing Act, 1969

During the year 324 applications were received for Qualification Certificates in respect of houses with or without the required amenities. Eighty-nine final certificates were issued and in three cases the applications were refused. Of the many applications received in respect of houses in which it was proposed to install bathrooms and waterclosets only about 25 per cent were finally dealt with during the year due to the delay in having the required amenities installed and the failure to notify that the work had been completed.

Disinfection and Disinfestation

Very little disinfection was carried out during the year for cases of infectious disease, and the work of disinfestation, mainly due to the rehousing programme, was of a similar tempo to the previous year.

Requests were again received to disinfect second-hand articles of wearing apparel which were being sent to European countries and certificates were issued in respect of 311 articles. A small charge was made for each parcel submitted.

Swimming Baths

During the year 140 samples of water from the 24 public and school swimming baths were submitted to the Public Health Laboratory for testing in respect of the residual chlorine content.

Water Supply

Routine sampling was continued during the year. Two hundred and five bacteriological and 248 plumbo solvency samples of the town's supply were examined. In addition, 113 samples of water taken from other sources, such as flooded cellars, by the district public health inspectors during the investigation of statutory nuisances were submitted for chemical examination.

Sixty-seven dwellings in the City are supplied with fluoridated water from the Rombalds Water Board. A constant check has been made on this supply by sampling, and the fluoride content has consistently been satisfactory.

We are indebted to the Waterworks Engineer, Mr. S. Asquith, B.Sc., M.I.C.E., M.I.W.E., for the following information as requested in Circular 1/70.

- 1. (a) (i) The quality has been satisfactory
- (ii) The quantity has been adequate
- (b) All waters are filtered and chlorinated before distribution.
- (c) Fluoride content
 - (i) Low Level, Gilstead Slow Sand Filters 0.1 p.p.m.
 - (ii) Intermediate Level, Chellow Heights 0.05 p.p.m.
 - (iii) High Level (1) Thornton Moor 0.1 p.p.m.
 - (2) Thornton Pressure 0.1 p.p.m.

2. Bacteriological Examination

- (i) Raw Water
 - Total samples collected 184
 - Samples containing presumptive coliforms 171
 - Samples containing E.coli type 1 163
- (ii) Treated and Distributed Water
 - Samples collected 2,627
 - Samples containing presumptive coliforms 117
 - Samples containing E.coli type 1 54

3. Chemical Examination

Results of analysis of water from the Corporation's three sources of supply are enclosed.

Plumbo-Solvency

- (i) Low Level

No evidence to indicate undue plumbo-solvency. Lime is added to the final water to counteract any plumbo-solvent tendency.
- (ii) Intermediate Level

No evidence to indicate undue plumbo-solvency. Lime is added to the final water to counteract any plumbo-solvent tendency.
- (iii) High Level
 - (1) Thornton Moor Distribution System

No evidence to indicate undue plumbo-solvency. Lime is added after filtration to counteract any plumbo-solvent tendency.
 - (2) Thornton Pressure Distribution System

No evidence to indicate undue plumbo-solvency. Lime is added after filtration to counteract any plumbo-solvent tendency.
 - (3) Brayshaw Reservoir Distribution System

No evidence to indicate undue plumbo-solvency. A scheme is underway to install lime dosing equipment at the reservoir outlet.
 - (4) Horton Bank Distribution System

No evidence to indicate undue plumbo-solvency. A scheme is underway to install lime dosing equipment at the reservoir outlet.

Rodent Control

Surface Treatment

During the year 1,555 rat and 1,947 mice infestations were dealt with.

Of 3,502 infested properties 3,450 were notified by the occupier and 52 were discovered by inspection of premises. 'Warfarin', 'Alphakil' and arsenious oxide were used to eradicate the rats and mice.

At the request of the Local Authority 53 premises were rat-proofed after treatment. Three 'block schemes' were carried out which necessitated the simultaneous treatment of premises and sewers.

Sewer Treatment

During the year 1,360 manholes were test baited and poisoned.

Food Hygiene

During the year 6,177 inspections of premises were made and 5,280 contraventions noted. As a result of these, 408 warning letters were sent and 1,109 verbal cautions issued.

The letters which have been sent have again been of an advisory rather than a threatening nature, but in two cases it was considered that conditions warranted the institution of proceedings. Particulars of these are recorded in a table in the Appendix.

Inspections of stalls and delivery vehicles carried out totalled 87. One hundred and thirty-five contraventions were noted, 37 warning letters were sent and 14 cautions issued.

Proceedings were instituted in 10 cases, particulars of which will be found in the Appendix. Statistical details of this work are contained in other tables in the Appendix.

The institution of legal proceedings is a matter to which detailed consideration is given in each individual case. The approach of the Public Health Inspector is generally to secure observance of legal requirements rather than to seek to take punitive action. Consideration must, however, be given to the extent of neglect or flagrant disregard of reasonable behaviour and also to the desirability of publicity associated with a prosecution as a reminder to traders in general of the need to maintain good standards of hygiene. In the various cases which were taken it was considered that the publicity aspect was of particular value in the cases where the market traders were placing food produce on the floor in the aisles in the markets, and this was also thought to be of particular value in the cases against the mobile traders of hot dogs, ice cream and fried fish and chips. Particular concern was felt at the poor hygienic conditions found to exist at a poultry slaughterhouse operated by a member of the immigrant population. This business had developed without any reference to the Department or, so far as is known, without seeking permission from anybody and when the business came to the notice of the Department many unsatisfactory features were found.

Particular concern is also felt when there is found a general failure to keep things clean. There is a tendency in the food preparation trade for the main

object of the business to become particularly demanding and fatiguing and the cleanliness may be neglected and fall below the standards which the public would expect.

Closely associated with the food hygiene legislation are the complaints dealt with relating to the presence of extraneous material in food and also the deterioration of food fitness by the development of mould and evidence of decomposition. The development of the pre-packaging of food has made it essential to have a proper system of stock rotation and many complaints arise from failures in this respect.

Also of particular concern is the number of occasions in which it is clearly indicated that a van salesman is taking old food out of shops when his management assert that no 'sale or return' arrangement is operative. The implication is that old food taken from one shop is being supplied as fresh food to another and it is a practice which is very difficult to control in the absence of date stamping of pre-packed food.

One of the cases taken in respect of extraneous matter in milk was of particular interest. A dairy farmer had established a complete pasteurising plant at his farm and had obtained a contract for the supply of bottled pasteurised milk to various Corporation establishments. Complaints were received from various establishments and also from some members of the public of the presence of visible dirt in the bottled milk. This was taken up with the farmer immediately, and the Ministry of Agriculture advised and yet a further series of similar complaints arose after a short interval. It was difficult to understand how dirt could get into the bottled milk to this extent in the first instance, but even more difficult to understand how it could recur after the farmer had been appraised of the complaint. Needless to say he not only received quite a heavy fine, but also lost his contract.

The work in the Division still brings contact with a wide range of immigrants, and premises occupied by the Pakistani immigrants represent the major portion. We have dealt with 181 food businesses operated by them in the City, including 11 wholesale premises, one canning factory, 112 grocery and mixed shops, 12 butchers' shops, 25 cafes (some with clubs), 14 private clubs, and various other trades, including sweet manufacture, confectionery, and chicken slaughter.

We also have a varied selection of businesses to deal with operated by immigrants from other countries, particularly restaurants operated by the Chinese and Cypriots, shops and cafes by West Indians, shops, clubs and manufacturing premises operated by Continental immigrants, and Hungarians seem to have a particular interest in the 'hot dog' stalls.

Milk Supply

Although over 90 per cent of the milk supplied retail to the consumer consists of processed milk there is still an appreciable quantity of untreated farm-bottled milk sold in the City. The drinking of untreated milk must carry with it the risk of infection, principally with the *Brucella abortus* organism, which causes undulant fever in humans. There are approximately 78 farms producing milk within the City boundary and, in addition, a large quantity of milk comes from the surrounding country areas to the processing dairies and also from retailers outside the City.

Regular testing of the supplies has been carried out during the year for chemical analysis, bacterial cleanliness and the presence of infection. Specific examinations have been carried out for the measurement of radio-activity and the presence of antibiotics. Cleanliness checks on the major supplies of fresh cream sold in the City have been continued.

Infection in Milk

Attention was again particularly directed to the eradication of Brucella infection from milk. Routine samples were obtained from the bulk milk of herds and were screened by the Brucella Ring Test. When results were positive, samples were obtained from each cow in the herd and those giving positive Ring Tests were further examined by culture examination.

A total of 538 herd samples was examined and 85 of these gave a positive result to the Ring Test. Forty-seven herd samples gave positive results on cultural examination. The number of individual cow samples examined from Bradford farms was 1,359. Two hundred and eight gave a positive result to the Ring Test and 109 of these were reported positive on culture examination.

Thirty-five notices were served on Bradford farmers requiring the heat treatment of the milk from individual cows under the provisions of the Milk and Dairies (General) Regulations, 1959. Notifications were sent to neighbouring authorities in 25 cases in respect of infected milk coming into the City. Following repeated positive samples of milk from a farm outside the City boundary a notice was served on the producer prohibiting the sale of the milk in Bradford without heat treatment.

It was noted that untreated milk was still on sale at six of the 16 vending machines and four of the 61 milk dispensers in catering establishments.

Milk and Dairies (General) Regulations, 1959

There were at the end of the year 1,229 persons registered for the sale of milk within the City. These may be classified as follows:—

Dairymen	...	...	...	...	...	...	239
Shops where milk sold in sealed bottles only	...	...	...	...	...	...	990

Automatic milk vending machines in factories and public places numbered 16 and milk dispensers in catering premises 61.

Legal proceedings were instituted against a dairy farmer in respect of the supply of pasteurised milk containing earthy matter. The milk was processed by the farmer and a large number of bottles of milk were found to contain this extraneous material. Seven informations were laid and fines totalling £105 were imposed.

Milk (Special Designation) Regulations, 1963 (as amended)

All dealers' licences are issued by the Food and Drugs Authority for the area in which the premises at or from which the milk is sold are situated. This was the last year of the five-year licensing period.

The following is a summary of the types of licences in operation:—

Dealer's (Pasteuriser's) Licence authorising the use of the special designation "Pasteurised"	2
Dealer's (Steriliser's) Licence authorising the use of the special designation "Sterilised"	2
Dealer's (Untreated) Licence authorising the use of the special designation "Untreated"	1
Dealer's (Pre-packed Milk) Licence authorising the use of the special designations:—	
(a) "Untreated"	245
(b) "Pasteurised"	358
(c) "Sterilised"	1,408
(d) "Ultra Heat Treated"	218

Milk Processing

During the year there were three dairies engaged in the heat treatment of milk; one by pasteurisation, one by sterilisation, and one carrying out both processes.

Chemical Examination

Five hundred and seventy-seven samples were submitted for chemical analysis, of which 17 gave an analysis under 3.0 per cent. of fat while 26 gave an analysis under 8.5 per cent. of non-fatty solids. In most cases the adulterations were small and warnings issued.

Legal proceedings were instituted against a wholesale producer supplying milk to a processing dairy in Bradford under Section 32 of the Food and Drugs Act, 1955 in respect of the sale of three churns of milk containing added water. The penalty imposed was a fine of £5.

A table giving comparative figures for the milks examined during the period 1948 to the present year will be found in the Appendix.

Examination of Raw Milk

Samples of raw milk were taken regularly during the year for bacteriological examination. In the case of unsatisfactory samples of farm milk, examination reports were notified to the Ministry of Agriculture, Fisheries and Food with a view to improving the cleanliness of the milk at the farm.

Where an unsatisfactory sample was obtained from a milk distributor, investigation was made into his methods of milk handling, etc., and appropriate warning was given.

Samples Taken	Methylene Blue Reductase Test		
	Pass	Fail	Void
548	449	48	51

Examination of Heat-treated Milk

The samples taken of heat-treated milk processed both in and outside Bradford were reasonably satisfactory, as shown in the following table:—

	Number of Samples	Phosphatase Test		Methylene Blue Reductase Test			Turbidity Test	
		Pass	Fail	Pass	Fail	Void	Pass	Fail
Pasteurised	408	404	4	386	17	5	—	—
Sterilised	60	—	—	—	—	—	60	—

In cases of test failures investigations were made and appropriate advice and warning given.

Radioactivity in Milk

Samples were examined throughout the year for radioactivity and the following are the monthly averages:—

Total radioactivity calculated as strontium 90 (including Iodine 131) and expressed as micro micro-curies per gram of calcium	Jan.	6.6	Apr.	6.8	July	6.6	Oct.	6.5
	Feb.	6.6	May	6.8	Aug.	6.4	Nov.	6.4
	Mar.	6.7	June	6.6	Sept.	6.45	Dec.	6.4

The present levels are far below any danger level and form only a tiny proportion of the natural background radiation to which we are all subjected daily. With the reduction in latter years of the testing of atomic weapons throughout the world, the health hazard from this source can now be regarded as negligible in this area.

Antibiotics in Milk

Antibiotics may be present in the milk of a cow which is receiving treatment and their presence constitutes a health hazard to the consumer. Antibiotics were found in one sample.

Ice Cream

Visits were made to ensure that ice cream premises and plant complied with the requirements of the Food Hygiene (General) Regulations, 1960, and the Ice Cream (Heat Treatment, Etc.) Regulations, 1959. Eight hundred and sixty-four premises were registered in respect of ice cream sales.

Inspections were also carried out under the provisions of the Food Hygiene (Market, Stalls and Delivery Vehicles) Regulations, 1966 of ice cream vehicles retailing in the City.

Legal proceedings were instituted against a self-employed ice cream vendor in respect of conditions found on the vehicles. Fines totalling £38 were imposed as detailed in the Appendix.

Bacteriological Examination

Sixty-three samples were submitted for examination during the year and were graded as follows:—

Provisional Grade					No. of Samples
Grade I	...	...	...	...	28
Grade II	...	...	...	...	12
Grade III	...	...	...	...	6
Grade IV	...	...	...	...	17
					<hr/> 63 <hr/>

If ice cream consistently fails to reach grades I and II, it is reasonable to regard this as indicating defects of manufacture or handling, which calls for further investigation.

Food and Drugs

The number of samples of Food and Drugs taken under the Act and submitted by the Sampling Officers for analysis was 1,153. Of these, 1,076 were genuine. In the majority of cases the adulterations were small and the vendors were cautioned. Legal proceedings were instituted in three cases under the Sausage and Other Meat Product Regulations, 1967 in respect of the sale of pork sausage deficient in meat content. Penalties imposed were fines of £10, £4, and £20 respectively.

Legal proceedings were instituted in one case under the Meat Pie and Sausage Roll Regulations, 1967 in respect of a sample of Cornish pasty having no meat content. The penalty imposed was a fine of £5.

The number of samples procured and examined during 1970 will be found in the Appendix.

Bacteriological Examination

Examinations were made of 192 foods and 35 swabs of food and equipment. Staphylococci were isolated from 10 samples, including poultry, roast pork, and swabs from equipment.

Food Inspection

Complaints relating to the sale of food in an unsatisfactory condition were again numerous, over 100 investigations being made by the Food and Drugs Inspectors. It is, of course, often found that people making complaints are unwilling to appear in court to assist in legal proceedings and consequently action in such instances is somewhat limited. Investigations at the manufacturers' premises in Bradford are always made following a complaint. In the case of outside manufacturers, the matter is taken up by correspondence and also by advice to the Public Health Department of the area concerned. Strong warning letters were sent to the manufacturers in some cases.

Supplies of fish, poultry, fruit and vegetables were regularly inspected throughout the year in the markets, poultry slaughterhouses, wholesale warehouses and retail shops. Particulars of the foods condemned (other than carcase meat) will be found in the Appendix.

In addition to the visits to food premises for inspection and condemnation of foods, routine visits were made to retail shops for the inspection of poultry as a large percentage of the birds sold do not pass through the wholesale market. There are now two poultry processing establishments operating in the City. Inspection of the birds has been carried out in accordance with Circular 22/61. Some difficulties are encountered in dealing with the slaughter of poultry by the immigrant population as it appears that a retail shopkeeper will slaughter a number of birds under Mohammedan ritual at non-specific intervals. Such premises have not been included as poultry processing establishments, but checks are made from time to time to see if slaughter is taking place, to check on the hygiene of the premises, and to examine the birds.

The figures requested for poultry processing establishments are as follows:—

(1) Number of poultry processing premises	2
(2) Number of visits	367
(3) Total number of birds processed ...	614,930
(4) Types of bird processed	cocks, hens, broilers, capons, geese
(5) Percentage of birds rejected as unfit for human consumption	1.2
(6) Weight of poultry condemned	22,594 lbs.

Legal proceedings in respect of offences against Section 2 or Section 8 of the Food and Drugs Act, 1955 were instituted in 23 cases, particulars of which will be found in the Appendix.

Checks have been made on the supplies of food by contractors to the Corporation establishments, both by inspection and analysis.

Pharmacy and Poisons Act, 1933

The Act places duties on this Authority for the control of certain poisons such as arsenical substances, mercuric substances, nicotine, phenols, nitrobenzine, ammonia, etc., used principally for agricultural, horticultural, industrial and sanitary purposes.

The register is kept by the Town Clerk's Department and the supervision at premises is carried out by the Food and Drugs Inspectors. The number of premises recorded was 202.

Meat Inspection

The total number of animals slaughtered in the Bradford area during 1970 was 147,355; a similar figure to the 1969 total. There was, however, a large increase in the number of cattle slaughtered and a comparative decrease in the number of pigs slaughtered. The cattle increase was in the region of 15 per cent. and was due to an increase in the meat contract trade to bulk suppliers operating outside the Bradford area.

The abattoir continued to function efficiently throughout the year, but the provision of an additional hanging rail to the cattle line as it leaves the slaughterhall would enable any additional trimming of fat, which the wholesalers may care to do, to be carried out in a compact area. This would prevent the wholesale meat market floor becoming dirty, wet, slippery and dangerous. This scheme has been approved for some years, but has not yet been commenced. The slaughterhall and cooling rooms were re-painted during the year and the Markets and Fairs Department have been asked to carry out re-painting in the meat market and the by-products department.

One hundred per cent ante-mortem and post-mortem inspection was carried out on all animals slaughtered in the public abattoir, and one hundred per cent post-mortem inspection was carried out on all animals slaughtered in the private slaughterhouses during the year. The total weight of meat and offal condemned was 229,486 lbs. and the total number of carcasses found to be unfit for human consumption was 327.

Brucellosis

The Brucellosis Eradication Scheme continued to expand on a voluntary basis and there was an increase of one hundred per cent in the number of reactors slaughtered in the public abattoir. There were 101 cattle slaughtered under the scheme, and in all cases blood smears from the uterus and/or the cotyledons were made and examined in the abattoir laboratory. In addition 54 specimens were examined in the laboratory from suspected cows which were not classified as Brucellosis reactors. The carcasses of all these animals were found to be fit for human consumption but certain parts of the offals were condemned.

Tuberculosis

Although tuberculosis has almost been eliminated from our meat animals there still persists a very small focus of infection. Fifty-six reactors to the Tuberculin Test were slaughtered in the Bradford abattoir during the year. On examination 19 animals were found to have visible lesions of tuberculosis in either the respiratory or digestive tracts. In each case the disease was localised and the carcasses were found to be fit for human consumption. The percentage of cattle inspected and found to be affected with tuberculosis is shown in a table in the Appendix as being 0.06; this figure being considerably less than the previous year, but the fact that there was a 50 per cent reduction in the number of reactors slaughtered contributes to the low percentage for 1970. There was also a percentage reduction of 0.01 in tuberculosis in pigs during 1970.

Anthrax and Foot and Mouth Disease

There were three notifications of suspected anthrax on farms in the area during the year which, on examination, proved to be negative.

There were no cases of suspected foot and mouth disease in the area.

Fowl Pest

There was one major outbreak of fowl pest in the City during 1970. It occurred on two smallholdings on the City boundary and resulted in 21 restriction notices being served upon other smallholders in the immediate vicinity. Strict control was kept over all contacts and over the disposal of dead birds, and no further extension of the disease in this sector of the City occurred.

In addition to the above confirmed outbreak there were 24 reported suspected cases which proved to be negative on examination. The incidence of Marek's disease in poultry declined in Bradford during the year.

Swine Fever

Eighteen cases of suspected swine fever were investigated during 1970, but none proved to be positive. Routine inspections of pigs under the Diseases of Animals Acts were carried out regularly and, in all, 632 visits were made to farms and piggeries.

Cysticercus Bovis

The number of cattle affected with *Cysticercus Bovis* was 121, none of which was a generalised case. All had lesions localised to the heart or masticatory muscles. All the cases were treated in Cold Store before being passed as fit for human consumption.

Laboratory

The abattoir laboratory was used extensively during the year and many slaughtering Authorities showed an interest in our routine coli plate counts. Two thousand, two hundred and five such tests were carried out on meat during and immediately after slaughter in the abattoir during 1970 and as a result variations were made in the slaughtering techniques which have, in turn, resulted in a reduction in the number of carcasses showing the presence of intestinal organisms on test.

Private Slaughterhouses

There are two licensed private slaughterhouses in Bradford and the total kill during 1970 was 349 cattle, 1,175 sheep and lambs, 4 calves and 313 pigs. The number of visits of inspection made to these private slaughterhouses during the year was 106.

Legal Proceedings

Legal proceedings under the Food and Drugs Act, 1955 were successfully instituted against a butcher following the investigation of a complaint that liver purchased from his shop had been found to have live maggots on it. The penalty imposed was a fine of £10.

HEALTH EDUCATION AND TRAINING

Health Education

This chapter recounts some of the activities organised through the Department where the primary objective has been to increase public awareness of health hazards. It concentrates on events which are new to the Health Education programme or otherwise noteworthy. It is not comprehensive for it does not describe the educational aspects of the daily work done by every member of the staff when they deal with the personal and environmental health problems of individual citizens. It is on these foundations that the more specialised parts of any Health Education programme is based.

A general increase in demand for advice and information on health topics has occurred. The demand comes in part from the schools, where health education is coming to be regarded as an integral part of any comprehensive syllabus, and in part from the adult public, who seek information on specific topics—drugs, sex, V.D., smoking, etc.

Health Education in Schools

Much of the work in schools is undertaken by teachers themselves, particularly in regard to basic instruction. The Health Education Officer and the Health Visiting Service are then invited to provide talks which are complementary to this instruction. All the health visiting staff are encouraged to become involved in the health teaching programmes of the schools for which they are responsible. This often means that a health visitor has a routine teaching commitment weekly or fortnightly throughout the school year or for a specific length of time.

The Health Education Officer spent 271 hours in schools, and gave 159 lectures as follows:

					Lectures in Schools
Sex Education	...	...	...	...	71
Family Planning (6th Forms)	...	...	...	...	3
Drugs	...	...	...	...	38
V.D.	...	...	...	...	23
Smoking	...	...	...	...	15
Home Safety	...	...	...	...	1
Hygiene	...	...	...	...	5
Feet	...	...	...	...	1
Others	...	...	...	...	2
Total					159

Work with educationally subnormal children, and classes in parentcraft, home-making and citizenship for children in ordinary schools but of limited academic ability, continue, and are felt to be of value in equipping these children for their future.

Other lectures

The Department frequently gets requests for lectures on health and related topics from a number of other organisations—parent/teacher associations, colleges of further education, youth clubs, church groups, etc., and during the year the following lectures were given to such organisations:

	No. of Lectures
Sex Education	17
Family Planning	4
Drugs	58
V.D.	17
Anti-smoking	8
Home Safety	5
Others	3
	<hr/>
	112 (156 hours)

The above figures do not include lectures given by the Deputy Medical Officer of Health.

Parentcraft

Organised by the Municipal Midwifery Service, there are 14 parentcraft courses running each week. Each course consists of eight sessions, and midwives, pupil midwives and health visitors take part.

Four classes for fathers were held during the year. The average attendance was eight.

Publicity

The Department has continued to make good use of all the communication media open to it in the dissemination of health information.

Press, radio and television reports, poster advertising in public buildings and transport, pamphlets and handbooks, have all been used in this work during the year. All publicity material is kept under review, so that topical matters e.g. fire safety in the weeks preceding 5th November and at Christmas time, water safety in the holiday season—may be brought to the notice of the public.

The film and filmstrip library has been maintained and extended. The filmstrips are being converted to slides and thus their durability increased. In all, the films were used on 124 occasions and the film strips or slides on 391 occasions. The latter are the principal visual aid support used by the midwives and health visitors in their day-to-day health and hygiene instruction classes.

Drugs

It will be realised that there continues to be public concern regarding the 'drug scene' in general, and therefore the health education resources of the Department have been active in this sphere.

The Deputy Medical Officer of Health and the Health Education Officer are both members of the Bradford Drug Addiction Liaison Committee, and through this Committee have contributed to Drug Education in the City. In co-operation with the Committee, local pharmacists, the City Police, and the Cleansing Department, a very successful Drug Collection Week was held in October. This was well supported by the press and the public themselves, and a large quantity of potentially dangerous pharmaceutical and other chemical agents was collected and destroyed, as follows:

DRUGS COLLECTED

Potassium cyanide	10 lbs.
Strychnine	102 ozs.
Arsenic	100 gns.
Extract Cannibis	4 ozs.
D.D.A. 18 amps morphia	
Tablets morphia, pethidene, physeptone	555
Barbiturates	26,600
Amphetamines (pure)	5,000
Misc. tablets	218,000
	<hr/>
Total	250,155 tablets

In addition to the above, 8,400 bottles of liquid and very many ointments were collected. The total weight collected was 1 ton 1 cwt. 15 lbs.

Home Safety

The Home Safety panel of the Health Education Section met on three occasions. The principal matters dealt with were the Drug Collection Week and the preliminary studies necessary in the preparation of a revised Home Safety Handbook.

Training

Medical Officers

Regular staff meetings were held throughout the year. Clinical and administration problems in relation to preventive medicine and its co-ordination with the family doctor and hospital therapeutic services were discussed.

All senior staff attended study days or went on short courses devoted to their speciality.

Thus the medical staff is enabled to keep the clinical practice of the Department up to date.

Dental Officers

One dental officer is at present undertaking the course at Leeds University leading to the D.D.P.H.R.C.S.

One dental officer attended a residential symposium on 'Child Dentition' held at Sunderland General Hospital.

One dental officer and three dental surgery assistants attended a Dental Health Education Clinical Meeting with Oral Hygiene Service arranged through the School Dental Service, York.

One dental officer attended a residential course arranged by the Society of Medical Officers of Health at Oxford.

One dental officer attended a residential International Seminar (W.H.O.) on Health Education at Manchester University.

Municipal Midwives

Pupil midwives spent three months in community care training in district practice. At the beginning of the year 26 pupils were in training, and during the year a further 63 pupils completed the training. There were 21 in training at the end of the year.

Obstetric nurses—15 students each spent two days on the district during their three months training.

Family Planning Association training—one clinic nurse and one midwife trained during the year.

During the year the following films were shown to midwives:

‘Uricult’

‘Examination of the New-born’

A Family Planning Film

‘Ante-natal Care’

District Nurses

(a) State Registered Nurses. Two courses were held during the year—in February all eight students (including five from Bradford) were successful; in October there were eight students including six from Bradford. Four did not take the examination for various reasons, and the results of the four who sat are awaited.

(b) State Enrolled Nurses. A course of instruction for the S.E.N. working on the district was held from 15th October to 18th December. Ten students entered including five from Bradford, and eight students sat the examination.

(c) Refresher courses. Two members of the Staff attended a general refresher course in April at Grantley Hall.

Observation visits were arranged for 49 student nurses from St. Luke’s Hospital and The Bradford Royal Infirmary Nurse Training Schools.

Visits were also arranged for 10 pupil nurses, who are training for the Roll of Nurses at The Children’s Hospital.

Lectures given by members of staff included five to nurses in training at St. Luke’s Hospital, six in various women’s organisations in the City, and at two courses in Home Nursing sponsored by the British Red Cross Society.

We were pleased to arrange for Mrs. Jenkins, (a W.H.O. Fellow, and Assistant Professor in Public Health Nursing, at the University of North

Carolina) to spend two days in the Department to observe our training methods, to study the syllabus and to have a look at community nursing in Bradford.

The Superintendent attended three seminars during the year:

1. The Implementation of the General Nursing Council 1969 Syllabus.
2. The Care of the Incontinent Person in the Community.
3. Community care trends—"Home from Hospital" published by the Dan Mason Research Committee.

Health Visitors/School Nurses

During 1970, two centre superintendents attended first line management courses. One health visitor attended a field work instructors course; four health visitors attended refresher courses, and five members of staff attended conferences of either one or two days duration. We encourage staff to attend conferences and study sessions as apart from the main subject of the meeting, the opportunity to meet colleagues in other authorities and to discuss with them their problems and new ideas is of benefit to all.

The following in-service training sessions were organised within our own Department:

The Control of Tuberculosis	Dr. J. S. Dodge, Principal Medical Officer, Epidemiology Mrs. E. Bell, Health Visitor specialising in Tuberculosis	
Changes in the Maternity Service	Miss G. Clayton, Matron, St. Luke's Hospital Miss E. R. Entwistle, Supervisor of Midwives	
The Care of the Geriatric Patient	Dr. R. K. MacCuish, Consultant Geriatrician	
Health Visitors' Study Session	Miss C. S. Sanderson Miss C. M. Thomson	} Health Visitors
Professional Development	Miss M. S. Benson, Royal College of Nursing	

The following observation visits were arranged for various members of staff:

Special Care Baby Unit, St. Luke's Hospital	Health Visitors
General Practitioner Maternity Unit, Bradford Royal Infirmary	Health Visitors
School for the Physically Handicapped, Lister Lane	Public Health Nurses

Day Nursery Staff

Five day nursery matrons attended conferences during the year, and the following observation visits were arranged:

Nursery Schools within the City	Day Nursery Matrons
The Nursery Nurse Training Section of the Bradford Technical College	Deputy Day Nursery Matrons

Nursery Nurses

The day nurseries have provided practical training for 25 student nursery nurses during 1970. Close co-operation between the tutors to the N.N.E.B. Course and Health Department nursing staff was maintained. Discussion and inter-change of ideas between them was to the benefit of all.

Mental Health Service Staff

Training is the responsibility of one of the senior divisional social workers. Unqualified staff in the Mental Health Service have regular periods of formal supervision with the senior members of the Staff. In addition to this, arrangements were made for staff members to attend case conferences at the psychiatric hospitals and Child Guidance Clinic. One member of staff is at present seconded to a full-time course at Leeds Polytechnic where he is preparing for the Certificate in Social Work.

Two members of the staff of the Adult Training Centre have been seconded to attend the Course for Teachers of Mentally Handicapped Adults at Hull College of Commerce. The Mental Health Service also plays an important part in the training of students from Universities and colleges, and during the year 14 students did a practical placement in the Mental Health Service.

Ambulance Service

During 1970 10 driver/attendants were sent on training courses for ambulance men held at W.R.C.C. Training Schools at Cheshire and Cleckheaton.

One ambulance controller attended the Man Management Course at the Bradford Technical College.

Public Health Inspectors

One student passed the final examination.

Two students will sit the final examination in June 1971.

} Original
four-year
part-time
course

Two students passed the Intermediate examination of the three-year Sandwich Course in June, 1970.

All classes were at the Faculty of Technology, Leeds Polytechnic.

Appendix

Table 1 *Vital Statistics, 1969 and 1970 (calculated from numbers supplied by the General Register Office)*

	1969	1970
Estimated population	293,210	291,960
Comparability factors—births	1.04	1.04
—deaths	0.96	0.97
Births (total live and still)	5,803	5,795
Births—live	5,731	5,720
—still	72	75
Illegitimate live births as a percentage of all live births	12.0	12.3
Crude live birth rate per 1,000 population	19.5	19.6
Live birth rate as adjusted by factor	20.3	20.4
Deaths	4,081	3,902
Crude death rate per 1,000 population	13.9	13.4
Death rate as adjusted by factor	13.3	13.0
Infant deaths	168	137
Infantile mortality rate per 1,000 live births	29	24
Infantile mortality rate per 1,000 legitimate live births ...	27	23
Infantile mortality rate per 1,000 illegitimate live births ...	45	33
Neo-natal mortality rate per 1,000 live births	17	14
Early neo-natal mortality rate per 1,000 live births ...	15	12
Stillbirth rate per 1,000 total births	12	13
Peri-natal mortality rate per 1,000 total births	27	25
Deaths due to pregnancy, childbirth or abortion ...	4	1
Maternal mortality rate per 1,000 total births	0.68	0.17
Tuberculosis rate per 1,000 population:		
(a) primary notifications—respiratory	0.67	0.63
—non-respiratory	0.36	0.23
(b) deaths—respiratory	0.03	0.03
—non-respiratory	0.007	0.006
Cancer of the lung, bronchus—death rate per 1,000 population	0.59	0.60

According to Departmental records:

900 live births } were transferred out
12 stillbirths }

165 live births were transferred in

700 deaths were transferred out

299 deaths were transferred in

Table 2 *Populations, Corrected Birth and Death Rates, and Infant Mortality Rates, 1923—1970*

Year		Population	Corrected Birth Rate	Corrected Death Rate	Infant Mortality Rate
1923	...	290,800	18.2	13.8	78
1924	...	290,200	16.9	14.9	92
1925	...	290,200	16.6	13.9	95
1926	...	288,700	16.3	13.6	92
1927	...	293,200	14.7	14.6	92
1928	...	288,500	15.3	13.6	69
1929	...	289,200	15.0	15.7	80
1930	...	293,254	14.9	13.5	75
1931	...	300,900	13.6	14.2	71
1932	...	296,300	13.6	13.9	75
1933	...	295,100	13.2	14.7	79
1934	...	293,650	13.7	13.4	62
1935	...	292,200	13.4	14.3	64
1936	...	290,500	13.4	14.9	82
1937	...	289,510	13.9	14.6	69
1938	...	288,700	13.5	13.8	58
1939	...	287,500	12.4	14.9	61
1940	...	271,700	12.8	15.9	68
1941	...	270,310	12.4	14.8	68
1942	Civil Popula- tion	264,800	13.9	13.3	50
1943		260,300	14.5	14.4	58
1944		261,890	16.2	15.0	53
1945		262,660	15.8	14.9	65
1946		279,040	19.4	14.5	49
1947	...	284,900	22.2	15.6	59
1948	...	288,500	18.8	13.4	43
1949	...	291,600	17.3	14.5	38
1950	...	294,300	16.7	14.2	38
1951	...	289,800	16.4	15.4	43
1952	...	288,000	15.9	13.7	33
1953	...	286,600	15.9	14.2	37
1954	...	286,500	16.4	14.8	31
1955	...	286,400	16.2	13.6	28
1956	...	286,400	16.8	14.1	28
1957	...	287,000	17.3	14.1	28
1958	...	287,800	17.7	13.9	30
1959	...	289,100	17.6	14.1	29
1960	...	289,860	18.7	12.8	28
1961	...	294,210	18.8	13.4	26
1962	...	296,220	19.6	13.8	26
1963	...	297,040	20.2	14.5	26
1964	...	298,220	20.2	13.3	27
1965	...	298,090	19.8	13.1	25
1966	...	297,100	19.1	13.5	29
1967	...	296,860	19.8	12.5	28
1968	...	294,440	19.7	13.1	28
1969	...	293,210	20.3	13.3	29
1970	...	291,960	20.4	13.0	24

Table 3 *Deaths of Babies Born at Home or in the General Practitioner Unit in 1970 and Dying in First Week of Life*

No.	Month	Social Class	Age of Mother	Preg. No.	Weight of baby lbs. — ozs.	Age of baby	Cause of death on certificate
Born and died at home							
1	January	3	22	2	5 — 6	5 mins	1a Asphyxia neonatorum b Prematurity
2	November	4	21	2	8 — 0	Few mins	1a Failure to establish respiration (precipitate delivery)
Born at home and dying in hospital							
3	January	4	32	4	2 — 9	1 hour	1a Prematurity with primary atelectasis
4	November	4	28	2	N.W.	3 hours	1a Asphyxia neonatorum b Severe anaemia 11 Hypothermia 1a Respiratory distress syndrome
5	December	4	18	2	N.W.	7 hours	1a Prematurity b Respiratory distress syndrome
6	December	3	19	2	3 — 6	2 hours	1a Prematurity b Respiratory distress syndrome
7	December	4	23	1	1 — 15	4 hours	1a Prematurity
Born at General Practitioner Unit and dying in hospital							
8	March	5	20	2	N.W.	23 hours	1a Tentorial tear b Pulmonary atelectasis c. Polydactyly r. thumb
9	June	3	24	1	6 — 12	1 day	1a Congenital diaphragmatic hernia with rudimentary left lung (repaired at operation on 29.6.70)
10	October	2	24	2	7 — 0	1 day	1a Heart failure b Transposition of vessels

Table 4 *Social Class of 1970 Births (total live and still but excluding 169 transfers in)*

Place of Birth	Social Class					No Occupation	Total
	1	2	3	4	5		
B.R.I G.P. Unit	13	60	623	167	238	—	1,101
B.R.I Con. Unit	35	112	857	263	408	2	1,677
Duke of York Home	—	—	—	—	—	—	—
St. Luke's Hospital	27	93	1,305	403	545	3	2,376
Domiciliary	14	31	281	56	108	—	490
	89	296	3,066	889	1,299	5	5,644
1969	100	307	2,949	1,042	1,170	17	5,585

Table 5 *Domiciliary, General Practitioner Unit and Transferred-in Stillbirths occurring in 1970*

No.	Month	Social Class	Age Group of Mother	Preg-nancy No.	Gesta-tion	Wt. of baby lbs.—ozs.	Sex	Known Factors
Domiciliary								
1	May	5	Under-20	1	35 weeks	1 — 6	M	Macerated stillbirth
2	December	3	25—29	2	—	2 — 3	M	Fresh stillbirth
General Practitioner Unit								
3	July	3	20—24	1	? Term	6 — 3	M	Post Mortem: foetal anoxia
4	August	5	20—24	2	34 weeks	3 — 7	F	Macerated stillbirth
Shipley Maternity Home								
5	May	1	30—34	3	42 weeks	10 — 3	M	Impacted shoulders at delivery

Table 6 *Neonatal Deaths in Premature Live Births, with Details of Premature Stillbirths, 1970*

Birth Weight Group	Prem. Stillbirths	% each Weight Group	Prem. Live Births	% each Weight Group	DIED			Total Deaths
					Within 24 hrs. of birth	In 1 and under 7 days	In 7 and under 28 days	
Up to and including 3 lbs. 4 ozs. (1,500 g)	22	47.8	43	8.1	11	9	1	21
Over 3 lbs. 4 ozs. up to and including 4 lbs. 6 ozs. (2,000 g)	10	21.8	78	14.65	4	4	—	8
Over 4 lbs. 6 ozs. up to and including 4 lbs. 15 ozs. (2,250 g)	7	15.2	135	25.4	1	2	1	4
Over 4 lbs. 15 ozs. up to and including 5 lbs 8 ozs. (2,500 g)	7	15.2	276	51.85	3	4	1	8
Total	46		532		19	19	3	41

Table 7 *Premature Live and Stillbirths, 1959–1970*

Year	Premature births	Live births	Still- births	Stillbirths as a percentage of all Premature births	All Premature births as a percentage of total births
1959	475	405	70	14.7	9.1
1960	509	444	65	12.8	9.1
1961	530	440	90	17.0	9.3
1962	530	463	67	12.6	9.1
1963	532	477	55	10.3	9.1
1964	554	488	66	11.9	9.4
1965	566	517	49	8.7	9.8
1966	604	531	73	12.1	10.9
1967	561	499	62	11.5	9.8
1968	556	508	48	8.6	9.9
1969	588	552	36	6.1	10.1
1970	578	532	46	7.9	9.9

Table 8 *Statistics relating to Illegitimate Births during 1970*

Number of mothers	...	...	...	...	...	...	...	...	646
Number of babies	...	...	...	...	...	...	...	...	653
Gravida 1	...	...	...	...	...	...	...	...	284
Gravida 2	...	...	...	...	...	...	...	...	101
Gravida 3	...	...	...	...	...	...	...	...	88
Gravida 4	...	...	...	...	...	...	...	...	56
Gravida 5+	...	...	...	...	...	...	...	...	96
Gravida not known	...	...	...	...	...	...	...	...	21
Marital Status									
Married	...	...	...	...	...	...	...	...	18
Single	...	...	...	...	...	...	...	...	427
Widowed	...	...	...	...	...	...	...	...	6
Divorced	...	...	...	...	...	...	...	...	46
Separated	...	...	...	...	...	...	...	...	124
Not Known	...	...	...	...	...	...	...	...	25
Age Groups									
13 years	...	...	...	...	...	...	...	...	—
14 years	...	...	...	...	...	...	...	...	2
15 years	...	...	...	...	...	...	...	...	15
16 years	...	...	...	...	...	...	...	...	24
17 years	...	...	...	...	...	...	...	...	54
18 years	...	...	...	...	...	...	...	...	74
19 years	...	...	...	...	...	...	...	...	52
20 years	...	...	...	...	...	...	...	...	51
21—30 years	...	...	...	...	...	...	...	...	267
31—40 years	...	...	...	...	...	...	...	...	79
Over 40	...	...	...	...	...	...	...	...	12
Not Known	...	...	...	...	...	...	...	...	16
Fate of Illegitimate Babies									
Baby adopted	...	...	...	...	...	...	...	...	30
In care of L.A.	...	...	...	...	...	...	...	...	35
Baby with mother	...	...	...	...	...	...	...	...	527
Baby with mother and her parents	...	...	...	...	...	...	...	...	144
Mother married subsequently	...	...	...	...	...	...	...	...	32
*Mother co-habiting	...	...	...	...	...	...	...	...	258
Babies died	...	...	...	...	...	...	...	...	15
Babies stillborn	...	...	...	...	...	...	...	...	3
Nationality of Mother									
British	...	...	...	...	...	...	...	...	587
West Indian	...	...	...	...	...	...	...	...	35
Asian	...	...	...	...	...	...	...	...	2
Other	...	...	...	...	...	...	...	...	22

(*in stable union 67, with putative father 177, others 14)

Table 9 *Oakwell House Mother and Baby Home. Statistical Report, 1970*

Total numbers of mothers in the Home during the year 81

Admissions

Ante-natal 47Post-natal 34

Average duration of stay in days

Ante-natal 32Post-natal 13

Total number of days, ante-natal and post-natal, in the year 2,581

Age Group (years)	14	15	16	17-20	21-30	31-40	Over 40
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Number	2	7	7	42	20	3	—
--------	---	---	---	----	----	---	---

Civil State Single Married Separated Divorced Widowed

Number	74	3	1	2	1
--------	----	---	---	---	---

Babies :

Total number in the Home during the year	81
--	----

Medical cases without their mothers	12
-------------------------------------	----

Placed for adoption straight from Oakwell House 4

Placed with foster parents at the end of ten days pending adoption	23
---	----

Kept by their mothers 37

Taken into the care of the Local Authority 3

Still in the Home on 31/12/70 2

Table 10 *Analysis of Infant Deaths, 1965—1970 (according to Departmental Records)*

Cause of Death	AGE AT DEATH						Cause of Death	
	1965	1966	1967	1968	1969	1970		
Prematurity* Unqualified	14	21	6	13	13	11	Infections	Accidental Deaths
	5	9	3	3	2	1		
	1	—	—	1	—	1		
	—	—	—	—	—	—		
	—	—	—	—	—	—		
	20	30	9	17	15	13		
	—	—	—	—	—	—		
	—	—	—	—	—	—		
	—	—	—	—	—	—		
	—	—	—	—	—	—		
Congenital Malformation	20	30	9	17	15	13	Infections	Accidental Deaths
	14.19	18.41	5.49	10.69	9.26	9.70		
	3.54	5.49	1.60	3.08	2.63	2.27		
	3	1	6	3	8	6		
	5	4	4	5	11	6		
	—	—	2	—	1	2		
	—	1	2	1	—	1		
	2	—	1	—	1	1		
	10	6	15	9	21	16		
	2	1	5	3	7	9		
Congenital Malformation	2	—	5	—	1	1	Infections	Accidental Deaths
	1	—	1	—	—	—		
	—	—	—	—	—	—		
	—	—	—	—	—	—		
	—	—	—	—	—	—		
	—	—	—	—	—	—		
	—	—	—	—	—	—		
	—	—	—	—	—	—		
	—	—	—	—	—	—		
	—	—	—	—	—	—		
Congenital Malformation	15	7	26	14	31	26	Infections	Accidental Deaths
	10.64	4.29	15.86	8.80	19.14	19.41		
	2.65	1.28	4.61	2.53	5.44	4.53		
	4	6	4	4	6	4		
	2.83	3.68	2.44	2.52	3.68	2.44		
	0.71	1.10	0.71	0.72	1.10	0.71		
	—	—	—	—	—	—		
	—	—	—	—	—	—		
	—	—	—	—	—	—		
	—	—	—	—	—	—		

*Some premature infant deaths are coded under other headings.

Table 11 gives a detailed analysis of all premature deaths.

Table 10 continued

Birth Injuries and Atelectasis including hyaline membrane disease and respiratory failure										Other Causes									
23	35	35	36	36	36	24	Under 1 day			1	3	2	2	—	—				
20	17	12	20	16	15	15	1—7 days			2	4	6	8	4	2				
—	—	1	—	—	—	—	1—2 weeks			—	—	1	—	1	—				
—	—	1	—	—	—	—	2—3 weeks			—	—	—	—	—	—				
—	—	—	—	—	—	—	3—4 weeks			—	—	—	—	—	—				
43	52	49	56	46	39	Total under 1 month			3	7	9	10	5	2	—				
—	1	—	2	—	1	1—3 months			1	2	2	—	1	4	—				
—	—	—	—	—	—	4—6 months			1	2	1	1	—	—	—				
—	—	—	—	—	—	7—9 months			—	1	1	1	1	—	—				
—	—	—	—	—	—	10—12 months			—	—	—	—	—	—	—				
43	53	49	58	46	40	Total under 1 year			5	12	13	12	7	6	—				
30.50	32.52	29.88	36.48	28.41	29.85	% of total infant deaths			3.54	7.36	7.92	7.55	4.32	4.48	—				
7.61	9.7	8.70	10.49	8.07	6.97	Rate per 1,000 live births			0.88	2.20	2.31	2.17	1.23	1.04	—				
78	90	84	89	92	79	Total under 1 year			63	73	80	70	70	55	—				

Table 11 *Analysis of Total Premature Infant Deaths, 1970*

Associated Condition	Age					Total
	Under 1 day	1—7 days	1—2 weeks	2—3 weeks	3—4 weeks	
Asphyxia neonatorum	1	1	—	—	—	2
Intracranial haemorrhage	1	—	—	—	—	1
Intrauterine anoxia	1	—	—	—	—	1
Atelectasis	5	3	—	—	—	8
Respiratory distress syndrome	7	3	—	—	—	10
Aspiration pneumonia	—	1	—	—	—	1
Rh incompatibility	—	1	—	—	—	1
Respiratory failure	—	1	—	—	—	1
Bilateral lobar pneumonia	—	—	1	—	—	1
Congenital oesophageal atresia	—	—	—	—	1	1
Unqualified	11	2	—	—	—	13
	26	12	1	—	1	40

Table 12 *Deaths of Infants under 1 Year of Age from Stated Causes during 1970 (according to Departmental Records)*

International Classification No.*	Cause of Death	Number
009	Diarrhoeal disease	6
033	Whooping cough	1
036	Myocardial infarction	1
255	Diseases of adrenal glands	1
320	Meningitis	4
324	Late effects of intracranial abscess or pyogenic infection	1
330	Hereditary neuromuscular disorders	1
433	Cerebral thrombosis	1
480	Viral pneumonia	1
481	Pneumococcal pneumonia	1
485	Bronchopneumonia, unspecified	28
490	Bronchitis, unqualified	4
552	Inguinal hernia with obstruction	1
560	Intestinal obstruction without mention of hernia	1
590	Infections of kidney	1
741	Spina bifida	1
742	Congenital hydrocephalus	3
743	Other congenital anomalies of nervous system	2
746	Congenital anomalies of heart	14
748	Congenital anomalies of respiratory system	2
750	Other congenital anomalies of upper alimentary tract	1
756	Other congenital anomalies of musculoskeletal system	1
767	Difficult labour with abnormality of forces of labour	1
772	Birth injury without mention of cause	5
774	Haemolytic disease of newborn with kernicterus	1
776	Anoxia and hypoxic conditions not elsewhere classified	34
777	Immaturity, unqualified	13
778	Other conditions of foetus or newborn	1
796	Other ill-defined and unknown causes of morbidity and mortality	1
N933	Foreign body in pharynx and larynx	1

(*based on the International Abbreviated List of 50 causes)

Table 13 *Location of Main Centres, Branch Clinics and Medical Centres (i.e. G.P. Units) and showing where applicable attendances at Child Health Clinics during 1970.*

Main Centres

Allerton	Wanstead Crescent	3,332
Bradford Moor	Carrington Street	4,337
Central	26 Edmund Street	6,369*
Eccleshill	Rillington Mead	1,684
Great Horton	Saint Street	2,358
Holmewood	Dulverton Grove	1,884
Manningham	20 Green Lane	7,266
Odsal	55 Odsal Road	1,937

Branch Clinics

Bierley	15 Dunsford Avenue	1,191
Bowling	18 Usher Street	1,288
Buttershaw	50 Reeve Road West	1,274
Central	40/42 Otley Road	2,147
Clayton	Glenholme, Pasture Lane	758
Idle	70 Albion Road	654
Thornton	Thornton Community Centre	1,173
Woodside	Eaglesfield Drive	1,228
Wyke	Worthinghead Road	1,786

Premises rented for Clinic Sessions

Bolton	Bolton Conservative Club	2,138
Bolton Woods	Haven of Rest	213
Girlington	Brownroyd W.M. Club	972
Heaton	St. Martin's Church Hall	2,284
Lidget Green	Bradford Rugby Union Club House	886
Oakenshaw	Oakenshaw Youth Club	381
Wrose	Bolton Villas Cong. Church Hall	668

Medical Centres (G.P. Units)

Idle High Street	864
New Cross Street	2,850
Park Road	—
Rooley Lane	—

*Total including attendances at Vaccination Centre 51,922

Table 14 *Record of Health Visitors' Work during 1970*

						First visits	Subsequent visits
Home visits to children:							
Born in 1970	...	...	...	...	...	5,730	16,609
Born in 1969	...	...	...	...	...	5,580	15,841
Born 1965—1968	...	...	...	...	...	14,793	28,591
Totals	...	...	...	...	...	26,103	61,041
Other visits to:							
Elderly persons	...	...	...	...	...	3,656	3,838
Diabetic cases	...	...	...	...	...	521	2,468
Child minders	...	...	...	...	...	456	736
Chronic sick persons	...	...	...	...	...	234	255
Cases of venereal disease	...	...	...	...	...	257	601
Tuberculosis households	...	...	...	...	...	994	2,045
Households with other infectious diseases	...	...	...	...	...	2,517	3,603
Immigrants	...	...	...	...	...	5,193	13,886
Children of mixed unions (not included under "immigrants")	...	...	...	...	...	244	13,716
						Number of visits	
Persons discharged from hospital	...	...	...	...	...	401	
Play groups	...	...	...	...	...	140	
Other home visits	...	...	...	...	...	4,663	
"No access" visits	...	...	...	...	...	5,660	
Other duties:						Number	
Child welfare centre sessions	...	...	...	...	...	1,666	
Other clinic sessions	...	...	...	...	...	597	
Mothercraft classes	...	...	...	...	...	352	
Hospital sessions	...	...	...	...	...	482	
Health education sessions	...	...	...	...	...	125	

Table 15 *School Health Service. Record of Work carried out by Health Visitors and Nurses, 1970*

Number of Home Visits:

In connection with head infestation and general hygiene	866
To follow up defects found	325
For hospital after-care	116
	<hr/>
TOTAL	1,307

Number of Personal Inspections in Schools:

For head infestation and hygiene	126,166
For preparation, weighing, measuring, vision testing, B.C.G. preparation and Heaf Gun testing, etc.	40,201
	<hr/>
TOTAL	166,367

Defects discovered:

Uncleanliness of body	Nil
Ringworm	24
Scabies	246
Impetigo	146
Inflammatory eye conditions	114
Defective vision	1,263
Squint	40
Otorrhoea	19
Infectious diseases	53
Other conditions	160
	<hr/>
TOTAL	2,065

Table 16 *Special Educational Treatment. Bradford Children accommodated in Schools not maintained by the Authority, 1970*

Handicap					Boys	Girls
E.S.N.	...	...	...	...	21	17
Maladjusted	...	...	...	...	17	4
Delicate	...	...	...	...	2	—
Epileptic	...	...	...	...	3	—
Deaf	...	...	...	..	3	1
Partially hearing	...	...	...	...	1	4
Blind	...	...	...	...	6	2
Partially sighted	...	...	..	...	—	2
Physically handicapped			...		12	8
					65	38
					103	

Table 17 *School Health Service. Medical Inspection and Treatment Returns, 1970*

A. Periodic Medical Inspections

Age Groups Inspected (By year of birth)	No. of Pupils who received a full medical examination	Physical Condition of Pupils (Inspected)		No. of Pupils found not to warrant a medical examination
		No. Satisfactory	No. Unsatisfactory	
(1)	(2)	(3)	(4)	(5)
1966 and later	641	639	2	—
1965	2,349	2,341	8	—
1964	2,840	2,823	17	—
1963	—	—	—	—
1962	—	—	—	—
1961	—	—	—	—
1960	—	—	—	—
1959	—	—	—	—
1958	—	—	—	—
1957	—	—	—	—
1956	—	—	—	—
1955 and earlier	—	—	—	—
Total	5,830	5,803	27	—
Column (3) total as a percentage of Column (2) total ...	...	...	...	99.54
Column (4) total as a percentage of Column (2) total ...	...	...	...	0.46

Table 17 continued

B. Pupils found to require Treatment at Periodic Medical Inspections
(excluding dental diseases and vermin infestation)

Age Groups Inspected (By year of birth)	For defective vision (excluding squint)	For any of the other conditions recorded at E below	Total Individual Pupils
1966 and later	4	51	54
1965	114	268	312
1964	105	364	401
1963	—	—	—
1962	—	—	—
1961	—	—	—
1960	—	—	—
1959	—	—	—
1958	—	—	—
1957	—	—	—
1956	—	—	—
1955 and earlier	—	—	—
Total	223	683	767

C. Other Inspections

Number of Special Inspections	...	...	7,983
Number of Re-inspections	...	...	4,432
Total	...	...	12,415

(Note: A special inspection is one that is carried out at the special request of a parent, doctor, nurse, teacher or other person.
A re-inspection is an inspection arising out of one of the periodic medical inspections or out of a special inspection).

D. Infestation with Vermin

- (a) Total number of individual examinations of pupils in schools by school nurses or other authorised persons ... 126,166
- (b) Total number of individual pupils found to be infested ... 3,856
- (c) Number of individual pupils in respect of whom cleansing notices were issued (Section 54 (2), Education Act, 1944) ... —
- (d) Number of individual pupils in respect of whom cleansing orders were issued (Section 54 (3), Education Act, 1944) ... —

(Note: All cases of infestation, however slight, are included.
The number recorded at (b) relates to individual pupils and not to instances of infestation).

Table 17 continued

E. Defects found by Periodic and Special Medical Inspections during 1970									
Defect Code No.	Defect or Disease			Periodic Inspections				Special Inspections	
				Entrants	Leavers	Others	Total		
4	Skin	...	...	159	—	—	159	424	
			O	325	—	—	325	64	
5	Eyes								
	(a) Vision	...	...	223	—	—	223	139	
			O	239	—	—	239	158	
	(b) Squint	...	...	114	—	—	114	28	
			O	170	—	—	170	62	
	(c) Other	...	...	49	—	—	49	52	
			O	26	—	—	26	9	
6	Ears								
	(a) Hearing	...	...	224	—	—	224	278	
			O	150	—	—	150	37	
	(b) Otitis Media	...	...	53	—	—	53	8	
			O	188	—	—	188	52	
	(c) Other	...	...	70	—	—	70	36	
			O	69	—	—	69	11	
7	Nose and Throat	...	...	168	—	—	168	68	
			O	707	—	—	707	110	
8	Speech	...	...	126	—	—	126	48	
			O	179	—	—	179	51	
9	Lymphatic Glands	...	...	12	—	—	12	67	
			O	147	—	—	147	20	
10	Heart	...	...	20	—	—	20	104	
			O	108	—	—	108	34	
11	Lungs	...	...	40	—	—	40	442	
			O	213	—	—	213	55	
12	Developmental								
	(a) Hernia	...	...	23	—	—	23	1	
			O	62	—	—	62	8	
	(b) Other	...	...	26	—	—	26	5	
			O	158	—	—	158	32	
13	Orthopaedic								
	(a) Posture	...	...	8	—	—	8	105	
			O	27	—	—	27	10	
	(b) Feet	...	...	46	—	—	46	45	
			O	123	—	—	123	36	
	(c) Other	...	...	60	—	—	60	26	
			O	144	—	—	144	39	
14	Nervous System								
	(a) Epilepsy	...	...	9	—	—	9	7	
			O	35	—	—	35	15	
	(b) Other	...	...	22	—	—	22	4	
			O	93	—	—	93	29	
15	Psychological								
	(a) Development	...	...	96	—	—	96	17	
			O	144	—	—	144	239	
	(b) Stability	...	...	110	—	—	110	39	
			O	498	—	—	498	138	
16	Abdomen	...	...	9	—	—	9	6	
			O	60	—	—	60	18	
17	Other	...	...	99	—	—	99	1,869	
			O	232	—	—	232	595	

T—requiring treatment

O—requiring observation

F. Treatment of Pupils

Note: This section gives the total numbers of:

- (i) cases treated or under treatment during the year by members of the Authority's own staff;

Table 17 continued

- (ii) cases treated or under treatment during the year in the Authority's school clinics under National Health Service arrangements with the Regional Hospital Board; and
 (iii) cases known to the Authority to have been treated or under treatment elsewhere during the year.

<u>(a) Eye Diseases, Defective Vision and Squint</u>						Number of cases known to have been dealt with
External and other, excluding errors of refraction and squint						10
Errors of refraction (including squint)						2,934
Total						2,944
Number of pupils for whom spectacles were prescribed ...						1,245
<u>(b) Diseases and Defects of Ear, Nose and Throat</u>						Number of cases known to have been dealt with
Received operative treatment:						
(a) for diseases of the ear						156
(b) for adenoids and chronic tonsilitis						1,674
(c) for other nose and throat conditions						227
Received other forms of treatment						43
Total						2,100
Total number of pupils in schools who are known to have been provided with hearing aids:						
(a) in 1970						20
(b) in previous years						204
(Note: A pupil recorded under (a) is not recorded at (b) in respect of the supply of a hearing aid in a previous year).						
<u>(c) Orthopaedic and Postural Defects</u>						Number of cases known to have been treated
(a) Pupils treated at clinics or out-patients departments ...						184
(b) Pupils treated at schools for postural defects						108
Total						292
<u>(d) Diseases of the Skin</u>						Number of cases known to have been treated
(Excluding uncleanliness, for which see Table D)						
Ringworm—(a) Scalp						—
(b) Body						3
Scabies						279
Impetigo						250
Other skin diseases						852
Total						1,384
<u>(e) Child Guidance Treatment</u>						Number of cases known to have been treated
Pupils treated at Child Guidance clinics						416
<u>(f) Speech Therapy</u>						Number of cases known to have been treated
Pupils treated by speech therapists						1,932
<u>(g) Other Treatments Given</u>						Number of cases known to have been dealt with
(i) Pupils with minor ailments						5,186
(ii) Pupils who received convalescent treatment under School Health Service arrangements						330
(iii) Pupils who received B.C.G. vaccination						576
(iv) Pupils treated by chiropodist						1,819
(v) Bowel infestations in immigrants						296
(vi) Tetanus immunisation						321
Total (i) to (vi)						8,528

Table 18 *School Dental Service, Statistics, 1970*

INSPECTIONS

	Inspected	Number of Pupils Requiring Treatment	Offered Treatment
First inspection—school	20,000	18,384	14,736
First inspection—clinic	11,300		
Re-inspection—school or clinic	930	580	
Totals	32,230	18,964	14,736

ATTENDANCES AND TREATMENT

	Ages 5-9	Ages 10-14	Ages 15 and over	Total
First visit	4,950	4,125	799	9,874
Subsequent visits	2,274	5,454	1,071	8,799
Total visits	7,224	9,579	1,870	18,673
Additional courses of treatment commenced	189	311	80	580
Total courses commenced	5,139	4,436	879	10,454
Courses completed				8,360
Fillings in permanent teeth	3,792	7,321	565	12,678
Fillings in deciduous teeth	2,201	326		2,527
Permanent teeth filled	3,746	7,208	1,546	12,500
Deciduous teeth filled	2,132	298		2,430
Permanent teeth extracted	482	1,589	393	2,464
Deciduous teeth extracted	3,621	1,238		4,859
General anaesthetics	1,100	1,480	240	2,820
Emergencies	285	384	71	740
Number of pupils X-rayed				757
Prophylaxis				6,160
Teeth otherwise conserved				27
Teeth root filled				36
Inlays				3
Crowns				79

ORTHODONTICS

New cases commenced during year ...	80
Cases completed during year	44
Cases discontinued during year	6
No. of removable appliances fitted ...	145
No. of fixed appliances fitted	8
Pupils referred to Hospital Consultant ...	7 (from 224 cases)

Table 18 continued

DENTURES

Pupils fitted with dentures (first time):

	Ages 5-9	Ages 10-14	Ages 15 and over	Total
with full dentures	—	1	2	3
with other dentures	2	59	27	88
Total	2	60	29	91
No. dentures supplied (first time or subsequent time)	4	78	40	122

ANAESTHETICS

General anaesthetics administered by Dental Officers 740

SESSIONS

		No. of clinical sessions in year						
		Adminis- trative sessions	School Service			M. & C.W. Sessions		Total Sessions
			Inspection at school	Treat- ment	Dental Health Education	Treat- ment	Dental Health Education	
Dental Officers (incl. P.S.D.O.) ...		104	140	2,659	—	153	—	3,056
Dental Auxiliaries ...		—	—	146	—	2	—	148
Dental Hygienist ...		—	—	—	—	—	—	—
Total		104	140	2,805	—	155	—	3,204
(Dental surgery assistant specialising in D.H.E.)		—	—	—	115	—	5	120

Table 19 *Dental Services for Expectant and Nursing Mothers and Children under 5, during 1970*

1. ATTENDANCES AND TREATMENT

	Children 0—4 (incl.)	Expectant and Nursing Mothers
First visit	502	131
Subsequent visits	161	125
Total visits	663	256
Additional courses of treatment commenced ...	28	7
Number of fillings	610	257
Teeth filled	588	236
Teeth extracted	600	260
General anaesthetics given	136	40
Emergency visits by patients	53	15
Patients X-rayed	6	6
Prophylaxis	345	60
Teeth otherwise conserved	40	—
Teeth root filled	—	—
Inlays	—	—
Crowns	—	—
Courses of treatment completed	424	110

2. PROSTHETICS

Patients supplied with F.U. or F.L. (first time) ...	5
Patients supplied with other dentures	4
Number of dentures supplied	16

3. ANAESTHETICS

General anaesthetics administered by Dental Officers—46

4. INSPECTIONS

	Children 0—4 (incl.)	Expectant and Nursing Mothers
Number of patients given first inspections during year	545	147
Number of patients in (1) and (4) who required treatment	502	133
Number of patients in (2) and (5) above who were offered treatment	502	131

5. SESSIONS

Sessions devoted to treatment	155
Sessions devoted to Dental Health Education ...	5 (D.S.A.)

Table 20 *Mental Health Service. Number of Patients referred to the Service during 1970*

	Under M	16 F	16 and M	over F	Total	Mentally Ill	Mentally Handi- capped or severely Mentally Handi- capped
(a) By General Practitioners	2	1	15	31	49	46	3
(b) By hospitals	2	—	125	244	371	365	6
(c) By the Local Education Authority	20	9	11	6	46	—	46
(d) By police or courts	—	—	1	1	2	2	—
(e) From other sources	—	2	10	21	33	27	6
Totals	24	12	162	303	501	440	61

(Referrals made for the purpose of obtaining admission to hospitals are not included).

Table 21 *Mental Health Service. Number of Patients provided with Care in the Community at December 1970*

	Resident/ Attend- ers 1.1.70	Admissions during 1970	Discharges during 1970	Resident/ Attend- ers 31.12.70
Lindley House:				
Junior Training Centre	181	38	76	143
Female Adult Training Centre	—	59	3	56
Melville House:				
Adult Training Centre	153	45	47	151
Wedgwood House	61	20	21	60
Thornlea Residential Unit	11	189	192	8
Listonshiels	25	22	21	26
Glenholme	27	36	36	27
Persons receiving Home visits not included above				
	Under 16 M	16 F	16 and over M	16 and over F
Mentally ill	—	1	154	330
Elderly } infirm	—	—	33	106
Mentally } infirm	—	—	33	106
Psychopathic	1	1	22	14
Mentally handicapped	14	12	78	66
Severely mentally handicapped	23	7	9	51
Totals	38	21	296	567

Table 22 *Mental Health Service. Patients admitted to Psychiatric Hospital under the Mental Health Act 1959, during 1970*

	Under 16		16 and Over		Total
	M	F	M	F	
(a) Under Section 5 (informal)	9	7	254	337	607
(b) Under Section 25 (observation)	—	—	27	33	60
(c) Under Section 26 (treatment)	—	—	5	4	9
(d) Under Section 29 (emergency)	1	—	70	99	170
(e) Under Section 60 (hospital order)	—	—	4	1	5
(f) Under Section 41 (guardianship to hospital)	—	—	—	—	—
Total	10	7	360	474	851

Table 23 *Child Guidance Clinic, 1970*

Summary of Sources of Referral of 340 children (209 boys, 131 girls)

Education Department and Schools	...	...	...	...	...	107
Parents	...	...	...	...	...	37
School Health Service	...	...	...	...	...	36
General Practitioners	...	...	...	...	...	36
School Psychological Service	...	...	...	...	...	21
Children's Department	...	...	...	...	...	35
Consultants	...	...	...	...	...	11
Probation Officers	...	...	...	...	...	9
Juvenile Liaison Officers	...	...	...	...	...	25
Child Welfare Departments	...	...	...	...	...	10
Other agencies	...	...	...	...	...	13
Total for the year						340

Table 24 Home Nursing Service. Analysis of Cases dealt with and Number of Visits made during 1970

Old cases (brought forward from 1969)	1,542	Classification of cases:	Medical ... 4,009	Cases sent in by:	General Practitioners 3,505	Summary of Diseases:	Tuberculosis ... 151
	New cases (a)							4,198	Hospitals ... 1,389	Other infectious diseases ... 36
					Public Health Dept. 227	Parasitic diseases ... 495	—
					Others ... 214	Malignant and lymphatic neoplasms ... 53	
						Asthma ... 109	
						Diabetes Mellitus ... 1,031	
Total cases (b)	5,740	(b)	5,740	(b)	5,740	Anaemia ... 341	
						Vascular lesions affecting the central nervous system ... 269	
						Other mental and nervous diseases ... 66	
						Diseases of the eye and ear ... 276	
						Diseases of the heart and arteries ... 229	
						Diseases of the veins ... 36	
						Upper respiratory diseases ... 319	
						Other respiratory diseases ... 589	
						Diseases of the digestive system ... 207	
						Diseases of the urinary system and male genital organs ... 107	
						Diseases of the breast and female genital organs ... 68	
						Complications of pregnancy and the puerperium ... 379	
						Diseases of the skin and subcutaneous tissue ... 326	
						Diseases of bone, joints and muscle ... 235	
						Injuries ... 397	
						Senility ... 21	
						Diseases not specified ...	
Discharge (c)	4,179	(c)	4,179	(b)	5,740	(b)	5,740
			</				

Table 25 *Supply of Milk, free of charge, to persons suffering from Tuberculosis, 1968, 1969 and 1970*

	1968	1969	1970
Number of patients suffering from tuberculosis who were recommended for free milk by the Senior Chest Physician during the year	16	13	10
Number of patients receiving free milk at end of year	48	43	46
Average number of pints per week	678	611	501
Average weekly cost to the Corporation during the whole year	£27.10.2	£25.15.0	£25.0.2
Average weekly cost to the Corporation during December	£26.1.10	£26.6.1	£11.8.5

During the year the supply of free milk to 28 persons, previously authorised by the Senior Chest Physician and the Medical Officer of Health, was permanently cancelled.

Table 26 *Chiropody Service. Treatments in 1970*

	No. of First Treatments	Subsequent Treatments	Total
Clinics and Handicapped Persons' Centre (2,736 sessions)	4,452	18,791	23,243
Domiciliary Visits	2,228	7,607	9,835
School Clinic, (97 sessions)	399	1,401	1,800
Totals	7,079	27,799	34,878

No. of individual patients receiving treatment during 1970:

- 7 expectant mothers
- 399 children under 15
- 178 handicapped persons
- 6,495 elderly citizens

Table 27 *Home Help Service, New Applications, Cases Helped, etc.*
1966—1970

New applications were received in respect of:

	1966	1967	1968	1969	1970
General and chronic sickness cases ...	293	290	239	182	180
Old people	1,108	1,105	1,185	1,218	1,182
Tuberculosis cases	2	2	—	2	2
Blind persons	25	16	23	5	12
Maternity cases	422	405	344	226	201
Totals ...	1,850	1,818	1,791	1,633	1,577

Number of new cases where help was given:

General and chronic sickness cases ...	255	252	215	154	157
Old people	962	999	1,101	1,123	1,105
Tuberculosis cases	2	2	—	2	2
Blind persons	25	16	22	4	10
Maternity cases	325	297	245	160	152
Totals ...	1,569	1,566	1,583	1,443	1,426

Cases carried forward from previous year	2,117	2,933	2,671	2,761	2,968
Total cases dealt with in year	3,686	4,499	4,254	4,204	4,394

Number of new cases attended in respect of which no charge was made:

General and chronic sickness cases ...	119	121	93	82	92
Old people	669	761	899	939	914
Tuberculosis cases	1	2	—	1	1
Blind persons	16	14	15	4	4
Maternity cases	54	61	52	28	30
Totals ...	859	959	1,059	1,054	1,041

Number of new cases (1970) in respect of which a charge was made:

General and chronic sickness cases ...	65
Old people	191
Tuberculosis cases	1
Blind persons	6
Maternity cases	122
Total ...	385

Table 28 *Ambulance Service. Patients, Mileage, etc., 1948—1970*

Year	PATIENTS			MILEAGE		
	Number Carried	% increase on previous year	Miles Travelled	% increase on previous year	Average Miles per patient	
1948	24,059	—	147,451	—	6.5	
1953	107,660	15.0	347,960	12.3	3.2	
1958	137,529	0.2	404,218	1.3(decrease)	2.9	
1960	163,411	12.6	495,831	13.1	3.0	
1961	175,467	7.4	505,979	2.0	2.9	
1962	198,673	13.2	516,761	2.1	2.6	
1963	214,075	7.6	557,270	7.8	2.6	
1964	233,823	9.2	622,977	11.8	2.7	
1965	258,328	10.5	676,384	8.6	2.6	
1966	276,745	7.1	695,145	2.8	2.5	
1967	289,793	4.7	720,559	3.7	2.5	
1968	293,018	1.1	719,378	0.16 (decrease)	2.45	
1969	295,659	0.9	730,062	1.5	2.47	
1970	287,958	2.6(decrease)	694,966	4.8 (decrease)	2.37	

Table 29 *Ambulance Service. Category of Patients and Type of Vehicle, 1970*

						Sitting Case Cars	Dual Purpose Ambulances	Total
Patients :								
(a) Accidents	...	...	...	...	...	73	6,979	7,052
(b) Others	...	...	...	...	...	6,301	107,418	113,719
(c) Mentally Handicapped Persons	...	...	...	...	...	59	119,658	119,717
(d) Physically Handicapped Persons	...	...	...	...	...	61	43,085	43,146
(e) Blind Persons	...	...	...	...	...	—	3,773	3,773
(f) Children to Day Nurseries	...	...	...	...	...	—	516	516
(g) Physically Handicapped Children (Education Department)	...	...	...	...	...	—	35	35
Totals						6,494	281,464	287,958

Table 30 *Ambulance Service. Journeys and Type of Vehicle, etc., 1970*

Journeys :						Sitting Case Cars	Dual Purpose Ambulances	Total
(a) "Section 27 patients", mentally handicapped and physically handicapped persons	...	...	...	...	...	1,746	46,158	47,904
(b) Abortive and service	...	...	...	...	...	97	1,083	1,180
(c) Analgesia	...	...	...	...	...	63	564	627
Totals	...	...	...	...	...	1,906	47,805	49,711
Mileage	...	...	...	...	...	48,976	645,990	694,966

Table 31 *Ambulance Service. An Analysis of the Increase in Patients Carried and Decrease in Mileage Travelled from 1969 to 1970*

PATIENTS					1969	1970	Difference
Accident and emergency cases	}	"section 27"	patients		7,427	7,052	— 375
Admissions, discharges, out-patients, etc.					115,307	113,719	— 1,588
Mentally handicapped persons					121,363	119,717	— 1,646
Physically handicapped persons					45,777	43,146	— 2,631
Blind persons					4,774	3,773	— 1,001
Physically handicapped children (Education Department)... ..					46	35	— 11
Patients to Day Nurseries					965	516	— 449
Totals ...					295,659	287,958	— 7,701
MILEAGE							
"Section 27" patients					490,165	475,390	— 14,775
Mentally handicapped persons					154,077	140,365	— 13,712
Physically handicapped persons					65,633	61,630	— 4,003
Blind persons					9,292	7,593	— 1,699
Other sections of the Health Department ...					4,939	7,019	+ 2,080
Mileage chargeable to Bradford "A" and "B" Groups Hospital Management Committees ...					266	201	— 65
Mileage chargeable to day nurseries					3,086	2,205	— 881
Mileage chargeable to Education Department					2,219	247	— 1,972
Mileage chargeable to Welfare Department— Removal of dead bodies					385	316	— 69
Totals ...					730,062	694,966	— 35,096

Table 32 *Vaccination of Children under 16 during 1970*

Type of Vaccine	COMPLETED PRIMARY COURSES						RE-INFORCING DOSES					
	Year of Birth						Year of Birth					
	1970	1969	1968	1967	1966	1963— 1966	1970	1969	1968	1967	1966	1963— 1966
						Others under 16						Others under 16
1. Triple (diphtheria, pertussis, tetanus)	537	3,281	125	50	33	2	2	55	105	29	54	5
2. Diphtheria/tetanus	4	47	8	17	592	149	—	12	15	12	3,143	81
3. Diphtheria	—	1	1	—	17	2	—	—	—	—	61	10
4. Tetanus	—	4	2	—	49	126	—	3	10	13	73	179
5. Poliomyelitis (Sabin-oral)	537	3,322	135	71	852	171	—	63	117	37	3,243	84
6. Measles	87	2,995	721	418	502	46			NOT APPLICABLE			3,544
7. Rubella	—	—	—	—	—	1,014			NOT APPLICABLE			
Children protected against: DIPHTHERIA (lines 1, 2, 3)	541	3,329	134	67	642	153	2	67	120	41	3,197	86
WHOOPING COUGH (line 1)	537	3,281	125	50	33	2	2	55	105	29	54	5
TETANUS (lines 1, 2, 4)	541	3,332	135	67	674	277	2	70	130	54	3,270	265
												3,791

The following vaccines are not used locally:

Quadruple (diphtheria, pertussis, tetanus, poliomyelitis)
 Combined diphtheria/pertussis
 Single pertussis
 Salk (injection) poliomyelitis

Table 33 *Analysis of Cases examined by Cervical Cytology in Local Authority Clinics during 1970*

Number of new patients seen	2,129
Number of patients for repeat checks after three years	2,600
Total number of patients seen	4,729
Total number of smears taken	4,766
Number of positive smears	31
Number of suspicious smears awaiting follow-up ...	29
Number of Trichomonas infections	149

Table 34 *Causes of Deaths, Males and Females, 1970*

International Classification No. (50 Causes)					Males	Females	Total
4.	Enteritis and other diarrhoeal diseases	...	...	...	10	—	10
5.	Tuberculosis of respiratory system	...	...	...	7	1	8
6.	Other tuberculosis, including late effects	...	...	...	2	1	3
9.	Whooping cough	...	...	...	1	—	1
11.	Meningococcal infection	...	...	...	3	1	4
14.	Measles	...	...	...	—	1	1
18.	All other infective and parasitic diseases	...	...	...	2	3	5
19.	Malignant neoplasms	...	...	...	366	329	695
20.	Benign and unspecified neoplasms	...	...	...	4	7	11
21.	Diabetes mellitus	...	...	...	6	13	19
23.	Anaemias	...	...	...	2	7	9
24.	Meningitis	...	...	...	—	1	1
26.	Chronic rheumatic heart disease	...	...	...	16	22	38
27.	Hypertensive disease	...	...	...	29	40	69
28.	Ischaemic heart disease	...	...	...	552	497	1,049
29.	Other forms of heart disease	...	...	...	69	109	178
30.	Cerebrovascular disease	...	...	...	264	405	669
31.	Influenza	...	...	...	13	20	33
32.	Pneumonia	...	...	...	169	120	289
33.	Bronchitis, emphysema	...	...	...	126	54	180
34.	Peptic ulcer	...	...	...	19	9	28
35.	Appendicitis	...	...	...	—	1	1
36.	Intestinal obstruction and hernia	...	...	...	7	10	17
37.	Cirrhosis of liver	...	...	...	5	2	7
38.	Nephritis and nephrosis	...	...	...	6	9	15
39.	Hyperplasia of prostate	...	...	...	6	—	6
41.	Other complications of pregnancy, childbirth and the puerperium	...	...	...	—	1	1
42.	Congenital anomalies	...	...	...	19	15	34
43.	Birth injury, difficult labour, etc.	...	...	...	24	14	38
44.	Other causes of perinatal mortality	...	...	...	8	7	15
45.	Symptoms and ill-defined conditions	...	...	...	7	18	25
46.	All other diseases	...	...	...	113	197	310
47.	Motor vehicle accidents	...	...	...	33	10	43
48.	All other accidents	...	...	...	27	38	65
49.	Suicides and self-inflicted injuries	...	...	...	12	1	13
50.	All other external causes	...	...	...	6	6	12
Totals					1,933	1,969	3,902

Table 35 *Relative Frequency of Primary Causes of Death. Bradford, 1970*

Cause of Death	Males	Females	Total	% of total deaths
1. Heart disease	666	668	1,334	34.4
2. Cancer	370	336	706	18.1
3. Cerebrovascular disease	264	405	669	17.3
4. Pneumonia	169	120	289	7.6
5. Bronchitis, emphysema and asthma	126	54	180	4.6
6. Violence	72	49	121	3.1
7. Birth injury, difficult labour, etc.	24	14	38	0.97
	1,691	1,646	3,337	

Total deaths were 3,902. Eighty-six per cent were due to the seven principal causes above. The remaining 14 per cent (565 deaths) are classified under 23 headings, but all of these single causes contributed less than one per cent each to total deaths.

Table 36 *Deaths by Separate Age Groups, Bradford, 1961–1970*

Age	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Under 1 year	145	157	156	157	144	163	160	160	168	137
1–4	15	23	20	19	34	26	38	20	20	26
5–14	27	19	19	17	21	12	29	20	14	19
15–24	36	36	27	33	45	40	37	31	28	35
25–44	136	164	147	122	146	132	113	126	131	133
45–64	936	937	1,024	873	938	902	817	859	886	788
65–74	1,099	1,141	1,143	1,100	1,051	1,122	1,047	1,129	1,161	1,095
Over 75	1,581	1,685	1,647	1,552	1,705	1,735	1,556	1,681	1,673	1,669
Total	3,975	4,162	4,183	3,873	4,084	4,132	3,797	4,026	4,081	3,902

Table 37 *Deaths from Cancer of the Lung and Bronchus, by Sex, Bradford, 1932–1970*

Year	Males	Females	Total
1932	18
1936	36
1940	42
1949	82
1950	94
1951	...	88	106
1952	...	74	94
1953	...	91	104
1954	...	89	103
1955	...	110	130
1956	...	116	133
1957	...	120	130
1958	...	123	150
1959	...	126	151
1960	...	126	142
1961	...	120	142
1962	...	143	167
1963	...	151	175
1964	...	127	151
1965	...	159	184
1966	...	117	141
1967	...	176	199
1968	...	167	190
1969	...	150	174
1970	...	152	186

Table 38 *Number of Notifications of Infectious Diseases, Bradford, 1960—1970*

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Infective enteritis ...	1,668	1,333	1,543	1,112	1,463	2,206	1,752	1,721	1,565	2,854	2,220
Dysentery ...	858	550	732	218	546	774	336	884	260	819	115
Salmonellosis ...	145	77	48	34	64	76	41	35	49	58	57
Food poisoning ...	31	128	12	23	136	—	5	196	56	10	60
Typhoid or paratyphoid fever ...	1	3	3	1	3	18	12	10	4	6	4
Measles ...	2,130	2,974	3,139	1,363	2,665	2,424	2,288	1,716	2,273	91	2,640
Whooping cough ...	796	126	29	265	303	83	255	189	173	50	161
Scarlet fever ..	264	161	132	181	256	354	273	148	125	171	77
Ophthalmia neonatorum	3	5	7	10	4	7	10	7	3	4	7
Pulmonary tuberculosis ...	193	230	259	279	254	191	180	168	186	196	199
Non-pulmonary tuberculosis ...	28	37	61	70	68	68	57	43	62	108	112
Diphtheria ...	—	—	—	—	1	—	—	—	—	—	—
Smallpox ...	—	—	12	—	—	—	—	—	—	—	—
Anthrax ...	—	—	—	—	—	—	—	1	—	—	—
Malaria ...	—	—	5	1	5	1	4	7	6	5	1
Poliomyelitis ..	1	5	8	—	1	—	—	—	—	—	—
*Acute meningitis ...	—	—	—	—	—	—	—	—	—	9	29
*Infective jaundice ...	—	—	—	—	—	—	—	—	—	429	293
*Leptospirosis ...	—	—	—	—	—	—	—	—	—	—	1

*First full year of notification in 1969

Table 39 *Age Distribution of Notified Cases of Infectious Diseases,
Bradford, 1970*

											Total
											Age un-
											known
											ages

Table 40 *Bradford Chest Clinic. New Cases of Tuberculosis discovered in 1970 with comparative figures for 1969*

	1969			1970		
	Respi- ratory Disease	Non- Respi- ratory Disease	Total	Respi- ratory Disease	Non- Respi- ratory Disease	Total
Males	112	50	162	128	35	163
Females	81	28	109	46	30	76
Children	15	8	23	11	3	14
Total ...	208	86	294	185	68	253

Table 41 *Bradford Chest Clinic. Analysis of Notifications in 1970 (253)*

						Males	Females	Children	Total
Local Authorities—									
(1) Bradford C.B.	...	...	...	...	...	157	76	14	247
(2) West Riding	...	...	...	...	...	6	—	—	6
Nationality—									
(1) English	...	...	...	...	...	53	15	1	69
(2) European	...	...	...	...	...	5	1	—	6
(3) Asian	...	...	...	...	...	105	60	13	178
Age—									
(1) Children	...	...	...	...	...	—	—	14	14
(2) 15/24	...	...	...	...	...	64	28	—	92
(3) 25/34	...	...	...	...	...	39	25	—	64
(4) 35/44	...	...	...	...	...	24	16	—	40
(5) 45/54	...	...	...	...	...	13	6	—	19
(6) 55+	...	...	...	...	...	23	1	—	24
Types of Disease—									
(1) Respiratory (positive sputa)	...	...	...	...	...	50	8	—	58
(2) Respiratory (negative sputa)	...	...	...	...	...	73	38	11	122
(3) Non-respiratory	...	...	...	...	...	40	30	3	73
Origin of cases referred to the Clinic—									
(1) General Practitioners	...	...	...	...	...	22	8	—	30
(2) M.M.R. Unit	...	...	...	...	...	47	18	5	70
M.M.R. Unit (G.P. referrals)	...	...	...	...	...	48	10	—	58
(3) Hospitals	...	...	...	...	...	43	36	6	85
(4) Contacts	...	...	...	...	...	3	4	3	10

Table 42 *Bradford Chest Clinic Attendances, 1966—1970*

	1970	1969	1968	1967	1966
New patients	1,139	1,334	1,443	2,205	3,813
New contacts	1,699	1,903	1,982	1,601	1,860
Total new patients	2,838	3,237	3,425	3,806	5,673
Clinic re-attendances	5,522	5,879	5,941	6,101	5,901
Contact re-attendances	1,717	1,718	1,223	717	672
B.C.G. vaccinations	527	529	662	559	706
Total out-patient attendances ...	10,604	11,363	11,251	11,183	12,952
Clinic sessions held	412	463	542	595	629

Table 43 *Total Additions and Deletions from Bradford Chest Clinic Tuberculosis Register, 1970*

	Respiratory Tuberculosis	Non- Respiratory Tuberculosis	Totals
Numbers on Register on 1/1/70 ...	1,240	236	1,476
Inward transfers	4	—	4
Cases re-discovered	13	—	13
Notifications—			
Negative secretions	122	44	166
Positive secretions	58	29	87
Total additions ...	1,437	309	1,746
Recovered	193	56	249
Died	19	1	20
Outward transfers	11	1	12
Other reasons	83	13	96
Total deletions ...	306	71	377
Number on Register on 31/12/70 ...	1,131	238	1,369

Table 44 *Deaths of Patients on Bradford Chest Clinic Tuberculosis Register, 1970*

		Respiratory	Non-Respiratory	Total
Males	...	18	1	19
Females	...	1	—	1
Children	...	—	—	—
<hr/>				
Total	...	19	1	20

Analysis of all deaths:

				Deaths due to Tuberculosis				Deaths not primarily due to Tuberculosis				Total
				M.	F.	Ch.	Total	M.	F.	Ch.	Total	
Known cases of Tuberculosis on Clinic Register			
Death notifications			
<hr/>												
Totals			

Table 45 *New Cases of Early Syphilis and Gonorrhoea attending the Bradford Special Diseases Clinic, 1946—1970*

				Early Syphilis			Gonorrhoea		
Year				Male	Female	Total	Male	Female	Total
1946	...	...	...	151	100	251	369	117	486
1947	...	...	...	117	93	210	264	94	358
1948	...	...	...	51	59	110	147	68	215
1949	...	...	...	40	49	89	121	53	174
1950	...	...	...	32	24	56	91	41	132
1951	...	...	...	24	7	31	94	31	125
1952	...	...	...	12	7	19	51	20	71
1953	...	...	...	5	4	9	87	32	119
1954	...	...	...	9	7	16	114	34	148
1955	...	...	...	14	8	22	102	28	130
1956	...	...	...	17	7	24	131	35	166
1957	...	...	...	11	3	14	322	84	406
1958	...	...	...	3	—	3	294	61	355
1959	...	...	...	3	—	3	419	103	522
1960	...	...	...	2	—	2	466	139	605
1961	...	...	...	—	—	—	625	158	783
1962	...	...	...	3	2	5	664	161	825
1963	...	...	...	4	—	4	707	237	944
1964	...	...	...	9	3	12	769	238	1,007
1965	...	...	...	14	6	20	530	199	729
1966	...	...	...	15	4	19	573	199	772
1967	...	...	...	11	9	20	570	227	797
1968	...	...	...	3	6	9	477	228	705
1969	...	...	...	12	7	19	392	220	612
1970	...	...	...	2	3	5	405	211	616

Table 46 *Number of New Registrations and Attendances at the Bradford Special Diseases Clinic, 1946—1970*

Year				Syphilis (all stages) and Gonorrhoea		Other Conditions		Total Attendances	
				Male	Female	Male	Female	Male	Female
1946	...	...	...	815	291	554	212	16,487	10,677
1947	...	...	...	622	287	456	226	11,235	9,326
1948	...	...	...	358	229	440	144	9,040	6,859
1949	...	...	...	293	184	400	133	7,957	5,647
1950	...	...	...	228	148	431	155	7,659	4,582
1951	...	...	...	194	107	390	101	7,370	4,292
1952	...	...	...	156	95	388	105	6,087	3,770
1953	...	...	...	160	103	458	141	7,239	3,957
1954	...	...	...	182	104	458	135	6,986	4,043
1955	...	...	...	174	97	427	140	6,345	3,733
1956	...	...	...	210	106	437	152	6,450	4,375
1957	...	...	...	406	134	525	153	8,733	3,818
1958	...	...	...	375	107	593	164	8,142	3,020
1959	...	...	...	436	118	605	213	8,662	3,810
1960	...	...	...	491	153	731	214	9,142	3,001
1961	...	...	...	644	176	780	219	10,019	3,220
1962	...	...	...	680	181	872	294	10,944	3,324
1963	...	...	...	721	248	877	339	9,918	3,715
1964	...	...	...	795	250	950	405	10,380	3,464
1965	...	...	...	557	215	971	472	9,652	3,652
1966	...	...	...	600	209	946	424	8,295	2,656
1967	...	...	...	593	250	1,057	491	7,514	2,618
1968	...	...	...	494	240	975	439	6,554	2,256
1969	...	...	...	415	233	1,130	493	6,058	2,233
1970	...	...	...	412	219	1,139	549	6,031	2,189

Table 47 *Particulars of Work Done by District Public Health and Housing Inspectors during 1970*

INSPECTION OF DWELLINGS

Houses inspected under the Housing Acts—others	...	...	...	...	...	1,798
—immigrants	...	...	...	...	...	2,934
Houses in respect of which notices were served requiring repairs	...	...	...	...	...	—
Houses rendered fit after formal notices:						
(a) by owners	...	...	...	...	...	—
(b) by Local Authority on default	...	...	...	...	...	—
Houses rendered fit without service of formal notices	...	...	...	...	...	—
Revisits—others	...	...	...	...	...	8,424
—immigrants	...	...	...	...	...	98
Certificates of disrepair—issued	...	...	...	...	...	—
—revoked	...	...	...	...	...	—
Houses let in lodging inspected—others	...	...	...	...	...	850
—immigrants	...	...	...	...	...	885
Notices served—owners	...	...	...	...	...	122
—occupiers	...	...	...	...	...	—
Notices complied with	...	...	...	...	...	30
Overcrowded houses visited—others	...	...	...	...	...	—
—immigrants	...	...	...	...	...	1
Houses decrowded	...	...	...	...	...	—
Houses inspected under Public Health Acts—others	...	...	...	...	...	4,709
—immigrants	...	...	...	...	...	455

Table 47 continued

[illegible]

INSPECTIONS AND VISITS

[illegible]

AGRICULTURAL (SAFETY, HEALTH AND WELFARE PROVISIONS) ACT, 1956

Agricultural units inspected	...	...	...	...	...	...	...	—
Units in respect of which notices were served	...	...	...	...	...	...	...	—
Notices complied with	...	...	...	...	...	...	...	—

MISCELLANEOUS NUISANCES, etc.

Dangerous places referred to City Engineer	...	...	...	...	...	27
Absence of, or defective dustbins referred to Cleansing Department	...	...	...	...	...	6
Choked sewers and street gulleys reported	...	...	...	...	...	371
Wastes of water reported to Waterworks Department	...	...	...	...	...	68
Samples of water taken for:						

(a) chemical analysis

drinking water—for fluoride	...	...	...	...	...	12
drinking water—for plumbo-solvency	...	...	...	...	...	248
swimming bath water	140
cellar water	113

(b) bacteriological examination

drinking water	205
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Premises dealt with under the Prevention of Damage by Pests Act, 1949	...	—
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DRAIN TESTING

Colour tests	Positive	189
							Negative	1,006
Smoke tests (rocket)		Positive	14
							Negative	...	...	11
Smoke tests (machine)		...	...	...	...	...	Positive	...	...	20
							Negative	...	...	33
Water under pressure tests			...	...	...	...	Positive	...	...	4
							Negative	...	...	2
Volatile tests		...	...	...	...	...	Positive	...	...	—
							Negative	...	...	—

DRAINAGE AND SANITARY ARRANGEMENTS

[illegible]

Table 47 continued

Eaves spouts repaired or renewed	31
Rainwater pipes disconnected	33
Rainwater conductors repaired or renewed	28
Sinks replaced	6
Sink waste pipes repaired or renewed	39
Waste water closets abolished	—
External water closets abolished	128
Water closet pedestals renewed	6
Water closet and flushing apparatus repaired	12
Water closets cleansed	4
General repairs to water closets	40
Internal water closets provided	278
Additional W.C. accommodation provided	191
Additional sanitary accommodation provided under the Agriculture (Safety, Health and Welfare Provisions) Act, 1956	2
Soil pipes repaired or renewed	16
Ventilating pipes repaired or renewed	10
Privy structures abolished	—
Privies converted to—W.C.'s	—
—chemical closets	—
Baths provided	328
Lavatory basins provided	346
Bathrooms provided	331
DWELLING HOUSES, YARDS, etc.	
Dampness excluded	64
Roofs repaired	58
Houses or parts cleansed	4
Verminous premises disinfected	77
Window cords renewed	11
General repairs executed	67
Cooking ranges repaired or renewed	2
Gas pipes or fittings repaired or renewed	—
Electric wiring or fittings repaired or renewed	5
Gas cookers provided	2
Electric cookers provided	3
New food stores provided	4
Existing food stores ventilated	6
Hand rails provided	3
Water supply improved	35
Houses supplied with City water supply	—
Domestic hot water supply provided	59
Means of heating provided	—
Noise nuisances abated—industry	1
—domestic	2
Septic tank and filter installations provided	3
Effluvium nuisances abated	1
Yard and passage paving repaired	—
Yards cleansed	23
KEEPING OF ANIMALS, etc.	
Improper keeping of swine prohibited	1
Piggeries repaired	—
New piggeries provided	—
Improper keeping of fowls, etc., prohibited	—
Accumulations of offensive matter, etc., removed	4
Accumulations of manure removed	5
Manure receptacles repaired	—
Manure receptacles provided	—

(for details of Slum Clearance see Table 56)

Table 48 *Water Supply. Samples taken for Plumbo-solvency during 1970*

Results of "first draw" samples, water collected in 20oz. bottles

Date	Source of Water	Address	pH	Pb. p.p.m.
9.1.70	Low Level	9 Peel Street	7.2	0.13
12.3.70	"	" "	9.0	0.06
14.5.70	"	" "	7.1	0.01
8.7.70	"	" "	7.0	0.26
14.9.70	"	" "	7.9	0.23
10.11.70	"	" "	6.8	0.13
9.1.70	Intermediate Level	123 Maudsley Street	8.3	<0.01
12.3.70	"	" "	8.2	0.02
14.5.70	"	" "	8.5	0.03
8.7.70	"	50 Bierley Lane	8.2	0.02
14.9.70	"	123 Maudsley Street	8.8	<0.01
10.11.70	"	" "	9.0	0.01
	High Level			
9.1.70	Thornton Moor D.S.	114 Hill Top Road	7.9	<0.05
16.3.70	"	" "	7.0	<0.05
15.5.70	"	Thornton Cemetery	8.5	<0.05
8.7.70	"	114 Hill Top Road	8.4	<0.05
10.11.70	"	" "	9.0	<0.05
	High level			
9.1.70	Thornton Pressure D.S.	5 Heys Crescent	8.6	<0.01
12.3.70	"	" "	9.0	0.02
14.5.70	"	" "	8.2	0.01
8.7.70	"	" "	8.6	<0.01
14.9.70	"	" "	7.8	0.06
10.11.70	"	" "	8.2	0.01
	High level			
9.1.70	Brayshaw Res. D.S.	18 Kenley Avenue	7.8	<0.01
12.3.70	"	" "	8.8	0.02
14.5.70	"	" "	7.6	0.01
8.7.70	"	" "	7.9	0.02
10.11.70	"	119 Poplar Grove	8.5	0.01
	High level			
9.1.70	Horton Bank Res. D.S.	841 Great Horton Road	7.6	<0.05
16.3.70	"	" "	7.4	<0.05
14.5.70	"	" "	7.0	0.01
8.7.70	"	894 Great Horton Road	6.8	0.03
14.9.70	"	896A Great Horton Road	7.6	<0.01
10.11.70	"	904 Great Horton Road	6.9	0.02

In addition to the above samples examined specifically for lead, some 37 eighty-ounce samples taken from consumers' taps "after running" were tested for the presence of lead, zinc and copper. All were found to contain less than 0.05 p.p.m. of lead.

Table 49 *Water Supply. Typical Chemical Analysis of Samples of Water from the Corporation's three Sources of Supply*

						High Level Supply	Parts per Million Intermediate Level Supply	Low Level Supply
Total Solids dried at 180°C	...	...	...	...	...	80	70	80
Ammonia Nitrogen	...	...	...	...	...	0.05	0.02	0.02
Albuminoid ammonia nitrogen	...	...	...	...	...	0.05	0.05	0.05
Nitrite nitrogen	...	...	...	...	...	Non detected	Non detected	Non detected
Nitrate nitrogen	...	...	...	...	...	0.6	0.4	0.8
Chlorine present as chloride	...	...	...	...	...	15	12	15
Oxygen absorbed from acid permanganate 4 hours at 27°C	...	...	...	...	...	1.0	1.0	1.2
Alkalinity as Calcium Carbonate	...	...	...	...	...	25	20	25
Permanent hardness as Calcium Carbonate	...	...	...	...	...	35	20	25
Total hardness as Calcium Carbonate	...	...	...	...	...	60	40	50
Metals								
Iron	...	...	...	...	...	0.10	0.05	0.10
Aluminium	...	...	...	...	...	0.1	0.10	0.10
Manganese	...	...	...	...	...	0.1	Trace	Trace
Lead	...	...	...	...	...	} <0.05 }	} <0.05 }	} <0.05 }
Zinc	...	...	...	...	...
Copper	...	...	...	...	...
Colour Hazen units	...	...	...	...	...	10	5	10
Turbidity parts per million	...	...	...	...	...	<1	<1	<1
pH	...	...	...	...	...	8.0	8.0	7.0

Table 50 *Factories Act, 1961. Inspections for Purposes of Provisions as to Health in 1970*

Premises	Number on Register	Inspections	Number of Written Occupiers Notices Prosecuted	
(i) Factories in which section 1, 2, 3, 4, and 6 are to be enforced by Local Authorities	85	10	—	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	1,992	32	5	—
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding outworkers' premises)	40	11	—	—
Total	2,117	53	5	—

Cases in which defects were found

Particulars	Found	Remedied	Referred		No. of cases in which prose- cutions were instituted
			To H.M. Inspector	By H.M. Inspector	
Want of cleanliness (S.1)	2	2	—	2	—
Overcrowding (S.2)	—	—	—	—	—
Unreasonable temperature (S.3)—	—	—	—	—	—
Inadequate ventilation (S.4) —	—	—	—	—	—
Ineffective drainage of floors (S.6)	—	—	—	—	—
Sanitary Conveniences (S.7):					
(a) Insufficient	6	6	—	—	—
(b) Unsuitable or defective	4	4	—	1	—
(c) Not separate for sexes	—	—	—	—	—
Other offences against the Act (not including offences relating to Outwork)	18	18	—	12	—
Total	30	30	—	15	—

Table 51 *Factories Act, 1961, Sections 133 and 134*
Number of Outworkers Engaged in Various Trades at August 1970

Nature of work	SECTION 133			SECTION 134		
	No. of outworkers in August list required by Section 133 (1) (c)	No. of cases of default in sending lists to the Council	No. of prosecutions for failure to supply lists	No. of instances of work in unwholesome premises	Notices served	Prosecutions
Wearing apparel, making, etc. ...	56	—	—	—	—	—
Textile Weaving ...	177	—	—	—	—	—
Total ...	233	—	—	—	—	—

Table 52 *Smoke Abatement. Improvements made to Boiler Plants, etc., in Industrial Premises during 1970*

Nature of work or equipment	Number of Units
Gas-fired boilers installed	3
Gas-fired air heaters installed	2
Oil-fired steam boilers installed	16
Oil-fired air heaters installed	21
Oil-fired central heating boilers installed	6
Oil burners installed	5
Oil burners maintained	9
Oil-fired metal plate furnace	1
Coal-fired steam boilers installed	5
Mechanical stokers maintained	6
New chimneys provided	19
Locomotive converted to oil firing	1
Incinerators installed	4
Incinerators abolished	3
Grit arrestors provided to cupolas	3
Cupolas maintained	5

Table 53 *Clean Air Act, 1956. Equipment in Industrial Premises given 'Prior Approval' during 1970*

Type of Unit	Number to be Installed
Oil-fired steam boilers	21
Oil-fired central heating boilers	23
Oil-fired air heaters	8
Oil burners	6
Gas-fired boilers	5
Incinerators	2

Table 54 *Slum Clearance Statistics, 1968, 1969 and 1970*

(1) Housing Act, 1957, Part III.

(Clearance Areas, Compulsory Purchase Orders and Clearance Orders)

	1968	1969	1970
No. of clearance areas represented	43	47	26
No. of clearance orders made or recommended	2	—	—
No. of compulsory purchase orders made or recommended	15	18	19
No. of clearance areas dealt with by agreement	—	2	1
No. of clearance areas purchased by agreement	2	—	3
No. of unfitness orders represented	—	—	—
Total houses affected by above actions	836	1,435	1,273
No. of families rehoused by the L.A.	396	446	349
No. of houses demolished	690	603	1,114
No. of families in confirmed orders awaiting rehousing ...	452	189	301
No. of houses in clearance orders and compulsory purchase orders awaiting confirmation	587	1,485	1,624

(2) Housing Act, 1957. Sections 16, 17 and 18.

(Informal Action and Local Authority owned Unfit Houses)

No. of houses represented	109	63	150
No. of demolition orders made	50	12	7
No. of closing orders made	73	42	35
No. of houses subject to undertakings to demolish	72	24	5
No. of houses subject to undertakings not to use for habitation	—	7	—
No. of undertakings to render fit for habitation executed ...	1	2	—
No. of L.A. owned houses certified unfit	71	25	108
No. of houses demolished	70	279	99
No. of families rehoused by the Corporation	79	251	94
No. of closing orders determined	3	4	1
No. of undertakings to render fit executed	—	2	—

(3) Slum Clearance Summary (1970)

Total houses represented to Committee in Clearance Areas (Clearance Orders and Compulsory Purchase Orders) and individually unfit etc.	1,423
Total houses demolished (all types)	1,213
Total families rehoused by the Corporation	474

Table 55 *Disinfection and Disinfestation during 1970*

Disinfection :							
Premises disinfected	...	...	...	...	...	...	4
Rooms disinfected	...	...	...	...	...	...	25
Articles disinfected	...	...	...	...	...	...	869
Library books destroyed	...	...	...	...	...	...	—
Disinfestation :							
Premises disinfested	...	...	...	...	...	...	368
Rooms disinfested	...	...	...	...	...	...	1,393
Articles disinfested	...	...	...	...	...	...	644
Cleansing of Verminous Persons and Articles :							
(1) Scabies—				New Cases		Number of Treatments Given	
Pre-school children—U.K. born	...	...	...	10		13	
Immigrant	...	...	...	5		7	
School children—U.K. born	...	...	...	24		33	
Immigrant	...	...	...	28		57	
Adults—U.K. born	...	...	...	33		51	
Immigrant	...	...	...	82		144	
(2) Head and Body Lice, Fleas, etc.—				New Cases		Number of Treatments Given	
Pre-school children	...	...	...	—		—
School children	...	...	...	2		2	
Adults	...	...	...	40		46	
Articles disinfested	...	...	...	...	...	...	372
Baths given	...	...	...	...	...	...	306
Operations of steam disinfestors	...	...	...	...	...	...	117

Table 56 *Rodent Control, 1970. Details of Premises Involved*

					Rats		Mice	
Canteens	...	...	...	...	9		20	
Cafés	...	...	...	...	5		17	
Food shops	...	...	...	...	33		54	
Farms	...	...	...	...	9		—	
Tips	...	...	...	...	9		—	
Business premises	...	...	...	...	262		340	
Private dwellings	...	...	...	...	1,135		1,144	
Schools and canteens	...	...	...	...	48		93	
Markets and abattoir	...	...	...	...	12		27	
B.C.P.T. Depots	...	...	...	...	3		2	
Other L.A. properties	...	...	...	...	30		50	
					1,555		1,947	

A total of 3,502 infestations was treated.

Major Infestations		Minor Infestations	
RATS	MICE	RATS	MICE
3	12	1,552	1,935

Table 57 *Food Premises Registered under Section 16, Food and Drugs Act, 1955, and Dairies Registered under Milk and Dairies (General) Regulations, 1959. Number of Inspections, 1970*

Section 16, Food and Drugs Act, 1955						Number	Number of Inspections
Premises used for the sale, storage or manufacture of ice cream	..	...	...	...	...	1,275	864
Premises used for the preparation of sausages or potted, pressed, pickled or preserved meats and other foods	...					280	401
Premises used for the preparation of fish by any process of cooking (fried fish shops)	...	...	...	...	...	244	364
Milk and Dairies Regulations, 1959							
Dairies	...	...	...	...	...	14	189

Table 58 *Number of Food Businesses at 1970 and compliance with Food Hygiene (General) Regulations 1960/62*

					No. of Premises	Premises fitted to comply with Reg. 16	Premises to which Reg. 19 applies	Premises fitted to comply with Reg. 19
Bakehouses	...	...	...	...	153	153	153	153
Butchers	...	...	..	...	275	275	275	275
Confectioners	...	...	...	...	90	90	41	41
Fish Friers	...	...	...	...	233	233	233	233
Greengrocery	...	...	...	...	254	254	85	85
Grocers	...	...	...	..	798	798	290	290
Ice Cream manufacturers	...	...	...	...	7	7	7	7
Industrial Canteens	...	...	...	...	221	221	221	221
Mineral Water manufacturers	...	...	...	...	7	7	7	7
Restaurants and cafés	...	..	...	...	280	280	280	280
Sweets	...	...	...	...	367	367	25	25
Commercial Hotels	..	...	...	...	23	23	23	23

Table 60 *Proceedings under the Provisions of the Food Hygiene (General) Regulations, 1960/1962, during 1970*

1. Proceedings were instituted against two partners of a retail shop engaging in the business of grocery, greengrocery and butchery.

Informations were laid as follows:

Regulation 8: Failure to protect dressed poultry from the risk of contamination in that carcasses had been placed in a position exposed to the risk of contamination.

Penalties imposed were two fines of £15, totalling £30.

Regulation 23: Failure to keep clean the floor, walls, ceiling and woodwork of a food room.

Penalties imposed were two fines of £15, totalling £30.

Regulation 24: Allowing the accumulation of avoidable refuse in a food room.

Penalties imposed were two fines of £15, totalling £30.

2. Proceedings were instituted against the owner of a business in respect of conditions found at premises used for the slaughtering and dressing of poultry.

Informations were laid as follows:

Regulation 5: Carrying on a food business in premises considered to expose food to the risk of contamination.

Penalty imposed was a fine of £50.

Regulation 6: Failure to keep bleeding cones clean.

Penalty imposed was a fine of £50.

Regulation 6: Failure to keep electric boiler clean.

Penalty imposed was a fine of £50.

Regulation 14: Sanitary convenience not in efficient working order.

Penalty imposed was a fine of £30.

Regulation 14: The situation of a sanitary convenience permitting the penetration of offensive odours into a food room.

Penalty imposed was a fine of £10.

Regulation 16: Failure to provide wash-hand basin.

Penalty imposed was a fine of £20.

Regulation 19: Failure to provide hot water to the sink for washing equipment.

Penalty imposed was a fine of £20.

Regulation 20: Failure to provide suitable and sufficient lighting.

Penalty imposed was a fine of £20.

Regulation 23: Failure to keep clean and in good order, repair and condition parts of the structure of food rooms.

Penalty imposed was a fine of £50.

Table 61 *Administration of the Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations, 1966 during 1970*

Inspections	87
Warning letters sent	37
Verbal warnings	14

Summary of types of contraventions found in food stalls and delivery vehicles:

Names and address not displayed	20
Address of garage not displayed	4
Repair and cleanliness of structure	16
Repair and cleanliness of equipment	5
Lighting	—
Ventilation	—
Food protection or contamination	7
Handwashing facilities—provision of wash-hand basin	5
Handwashing facilities—provision of soap, towels and nailbrush	7
Washing-up facilities	11
Water supply (including lack of hot water)	8
Personal cleanliness	—
Overclothing	1
First aid materials	22
Storage of refuse	27
Separation of unfit food	2

Proceedings under the Provisions of the Regulations

Proceedings were instituted against five market traders under Regulation 7 for placing food lower than 18 inches from the ground when not adequately protected from the risk of contamination. Details of the cases and penalties are as follows:

1. Three trays of Guernsey tomatoes and carton of cauliflowers—fined £5.
 2. A crate of spring cabbage—two partners fined £2.10s. each.
 3. A wire basket containing boiled crabs—fined £5.
 4. Two boxes of lettuce, a crate of cauliflowers, and a box containing bananas, apples, lemons and an orange—fined £5.
 5. A tray of gooseberries—fined £5.
6. Proceedings were instituted under Regulation 8 against a food handler in the Fish Market as a result of smoking a cigarette whilst in a food room in which there was open food. Penalty imposed was a fine of £5.
7. Proceedings were instituted against a self-employed ice cream vendor in respect of conditions found on an ice cream vehicle.

Informations laid were as follows:

Regulation 6(1) Failure to keep clean the lid of an ice cream conservator.
Penalty imposed—fined £6.

Regulation 13(1) Failure to display name and address of the person carrying on the business.
Penalty imposed—fined £3.

Regulation 15 Failure to provide a supply of clean and wholesome water.
Penalty imposed—fined £5.

Regulation 16(2) Failure to provide an adequate supply of hot water at a suitably controlled temperature.
Penalty imposed—fined £5.

Regulation 16(3) Failure to provide soap and nailbrush at the wash-hand basin.
Penalty imposed—fined £5.

Table 61 continued

- Regulation 17 Failure to provide first aid equipment.
Penalty imposed—fined £3.
- Regulation 18(b) Failure to provide a supply of hot and cold water or hot water at a suitably controlled temperature at the sink for washing equipment.
Penalty imposed—fined £5.
- Regulation 20 Properly avoidable refuse was deposited on the stall.
Penalty imposed—fined £3.
- Regulation 22 No suitable receptacle was provided for refuse and rubbish.
Penalty imposed—fined £3.
8. Proceedings were instituted against two partners in respect of conditions found on a vehicle used for the preparation and sale of hot dogs and hamburgers.
Informations were laid as shown below and the penalties were imposed on the partner who was operating this particular vehicle at the time of inspection:
- Regulation 8(a) Failure to keep hands as clean as reasonably practicable—fined £5.
- Regulation 9 Failure to wear clean, washable overclothing—fined £5.
- Regulation 13(1) Failure to display name and address of the person carrying on the business—fined £2.
- Regulation 15 Failure to provide water supply—fined £5.
- Regulation 16(1) Failure to provide wash-hand basin—fined £5.
- Regulation 17 Failure to provide first-aid materials—fined £3.
- Regulation 18(a) Failure to provide sink—fined £5.
9. Proceedings were instituted against the proprietor of the business in respect of conditions found on a cart used for the preparation and sale of hot dogs and hamburgers.
Informations were laid as follows:
- Regulation 9 Failure to wear clean, washable overclothing—fined £5.
- Regulation 13(1) Failure to display name and address of the person carrying on the business—fined £2.
- Regulation 15 Failure to provide water supply—fined £5.
- Regulation 16(1) Failure to provide wash-hand basin—fined £5.
- Regulation 17 Failure to provide first-aid materials—fined £3.
- Regulation 18(a) Failure to provide sink—fined £5.
- Regulation 19 Failure to provide sufficient lighting—fined £5.
10. Proceedings were instituted against the owner of a business in respect of conditions found on a vehicle used for the preparation and sale of fried fish and chips .
Informations were laid as follows:
- Regulation 5 Failure to keep the floor clean—a plea of not guilty was made and the defendant was given an absolute discharge.
- Regulation 8 Failure to secure compliance by employees with the requirement to keep their overclothing clean—a plea of not guilty was made but the magistrates imposed a fine of £10.
- Regulation 15 Failure to provide water supply—a plea of guilty was made and a fine of £10 imposed.
- Regulation 16(1) Failure to provide a wash-hand basin—a plea of not guilty was made and a fine of £5 imposed.
- Regulation 16(3) Failure to provide soap, towel or nailbrush—a plea of guilty was made and fine of £10 imposed.
- Regulation 18 Failure to provide an adequate supply of hot and cold water at a suitably controlled temperature for the sink—a plea of guilty was made and a fine of £5 imposed.

Table 62 *Food Inspection, 1970. Offences against Section 2 or Section 8 of the Food and Drugs Act, 1955*

Sale of mouldy pie—fined £12.
Sale of mouldy loaf—fined £15.
Sale of mouldy loaf (Sections 2 and 113)—fined £15.
Sale of mouldy pie—fined £10.
Sale of mouldy loaf—fined £5.
Sale of mouldy brown loaf—fined £5.
Sale of dirty cake from mobile shop—fined £5.
Sale of tin of meat containing fly—fined £10.
Sale of tin of Irish stew containing gristle and hide—fined £25.
Sale of a mouldy sausage roll—fined £5.
Sale of chocolate biscuits damaged by mice—conditional discharge.
Sale of milk containing extraneous matter (7 informations)—fined £15 in respect of each information.
Sale of mouldy cheese—fined £35.
Sale of mouldy meat pie—fined £10.
Sale of mouldy meat pie—fined £10.
Sale of mouldy fruit pie—fined £10.
Sale of mouldy meat pie—fined £10.
Examples of other complaints investigated are as follows:
Bread eaten by birds.
Cigarette end in meat.
Illness due to consumption of pork sandwich.
Cigarette end in dinner.
Bread with ink on.
Hair in fish and chips.
Caterpillar in canned tomatoes.
Insects in sauerkraut, cakes, tinned meat, corned beef sandwich.
Damaged cans of food.
Dirty milk bottles.
Dirty ice lolly.
Glass in jam sandwich.
Stale cream cake.
Unsound chickens.
Dirt in sandwich.
Maggot in peas.
Mouldy cheese spread, chocolate, sausage, creamed dessert, corned beef, mushrooms, bread, grapes, cream cake, marmalade, eggs, cream buns, salad sandwich.
Complaints of unfitness of food for human consumption, including meat products, chicken, meat, onions, frozen foods, Brussels sprouts.
Maggoty bacon.
Metal in cheese.
Glass in fish cake.
Worm in chickens.
Hide in beef pie.
Silver fish in carton of eggs.
Illness due to consumption of mineral water.
Dirty teacake.
Needle in toffee.
Metal in sausage.
Larval infestation of chocolate and rice.
Paraffin in mineral water bottles.
Cigarette end in strawberry tart.
Extraneous matter in bread, including string, paper, hair, mouse droppings, bristle.

Table 63 *Chemical Analysis of Milk, 1947—1970*

YEAR	FAT			3.0% to 3.5%			Over 3.5%			SOLIDS			NOT FAT			Total
	Under 3.0%	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent	Under 8.5%	No.	Per cent	8.5% and over	No.	Per cent	
1970 ...	17	2.9		205	35.6	355	61.5			26	4.5		551	95.5		577
1969 ...	7	1.2		169	32.4	346	66.4			58	11.1		463	88.9		521
1968 ...	7	0.8		310	33.7	602	65.5			14	1.5		905	98.5		919
1967 ...	36	3.0		381	31.6	784	65.4			72	6.1		1,119	93.9		1,191
1966 ...	44	3.4		453	34.7	807	61.9			87	6.7		1,217	93.3		1,304
1965 ...	34	3.4		304	30.1	672	66.5			14	1.4		996	98.6		1,010
1964 ...	28	3.6		299	38.0	959	58.4			20	2.5		766	97.5		786
1963 ...	65	4.8		573	40.9	733	54.3			46	3.4		1,305	96.6		1,351
1962 ...	46	3.5		513	39.6	737	56.9			19	1.5		1,277	98.5		1,296
1961 ...	49	4.3		326	28.9	752	66.8			41	3.6		1,086	96.4		1,127
1960 ...	94	5.6		448	26.7	1,134	67.7			15	0.4		1,661	99.6		1,676
1959 ...	27	2.0		276	23.0	895	75.0			12	1.0		1,186	99.0		1,198
1958 ...	27	2.0		274	21.0	990	77.0			13	1.0		1,287	99.0		1,300
1957 ...	71	6.0		338	28.6	772	65.3			28	2.3		1,153	97.6		1,181
1956 ...	94	6.7		453	32.2	857	61.1			80	5.7		1,325	94.3		1,405
1955 ...	28	2.6		312	28.8	743	68.6			173	16.0		910	84.0		1,083
1954 ...	23	2.4		189	19.5	759	78.1			168	17.3		803	82.7		971
1953 ...	33	4.2		190	24.0	567	71.8			196	24.8		594	75.2		790
1952 ...	21	2.5		168	19.5	668	78.0			196	22.9		661	77.1		857
1951 ...	14	1.9		198	27.2	515	70.9			151	20.8		576	79.2		727
1950 ...	10	1.3		188	25.6	539	73.1			95	12.9		642	87.1		737
1949 ...	8	1.7		190	40.5	271	57.8			58	12.4		411	87.6		469
1948 ...	8	1.4		235	41.7	320	56.9			131	23.3		432	76.7		563
1947 ...	6	1.0		248	41.1	349	57.9			157	26.0		446	74.0		603

Table 64 *Food and Drug Samples Procured and Examined in 1970*

Nature of Sample	Number examined			Number Adulterated (or otherwise giving rise to irregularity)		
	Formal	In- formal	Total	Formal	In- formal	Total
Milk	483	94	577	20	1	21
Cornish pasty	5	14	19	5	5	10
Pork sausage	4	28	32	2	15	17
Beef sausage	1	18	19	—	7	7
Steak pie	2	4	6	—	2	2
Pork pie	—	1	1	—	1	1
Pork and tomato snack ...	—	1	1	—	1	1
Hamburgers	—	1	1	—	1	1
Potted meat	—	1	1	—	1	1
Sweet potatoes	3	—	3	—	—	—
Chipped potatoes	—	2	2	—	2	2
Crinkle cut chips	—	1	1	—	1	1
Washed new potatoes	—	1	1	—	1	1
Guava jelly	1	1	2	1	1	2
Lemon hot pickle	—	1	1	—	1	1
Clear mixed pickle	—	1	1	—	1	1
Lime pickle	—	1	1	—	1	1
Ice cream	—	11	11	—	1	1
Dairy ice	—	1	1	—	1	1
Lemon curd	—	1	1	—	1	1
Cheese spread	—	4	4	—	1	1
Cream cheese with pineapple ...	—	1	1	—	1	1
Joshanda	—	1	1	—	1	1
Fruit Salad	—	1	1	—	1	1
Whisky	6	—	6	—	—	—
Totals	505	190	695	28	49	77

In addition to the above, 458 (informal) samples of a wide variety of food and drugs were taken. None were reported adulterated, etc.

The total of samples taken during the year was 1,153 compared with 1,068 in 1969.

Table 65 *Food and Drug Sampling. Proceedings taken in respect of unsatisfactory samples obtained under the provisions of the Food and Drugs Act, 1955*

1. Proceedings were instituted against a butcher in respect of the sale of pork sausage which contained 47.7% of meat instead of the minimum 65.0% required by the Sausage and Other Meat Product Regulations, 1967.
Penalty imposed was a fine of £10.
2. Proceedings were instituted against a butcher in respect of the sale of pork sausage which contained 44.7% of meat instead of the minimum 65.0% required by the Sausage and Other Meat Product Regulations, 1967.
Penalty imposed was a fine of £4.
3. Proceedings were instituted against a shopkeeper in respect of the sale of a meat pie described as "Cornish Pasty" which had no meat content instead of the minimum 12.5% required by the Meat Pie and Sausage Roll Regulations, 1967.
Penalty imposed was a fine of £5.
4. Proceedings were instituted against the manufacturer under the provisions of Section 2 and Section 113 of the Act in respect of the sale of pork sausage which had a total meat content of less than 65.0% namely 60.7%, and which had a lean meat content of 24.3% instead of the minimum 32.5% required by the Sausage and Other Meat Product Regulations, 1967.
Penalty imposed was a fine of £20.
5. Proceedings were instituted against a dairy farmer in respect of the sale of three churns of milk containing added water, the percentages being not less than 2.1%, 4.9% and 2.8% respectively.
Penalty imposed was a fine of £5.

Table 66 *Condemned Tin Goods, 1970*

				Tons	cwts.	qrs.	lbs.
Meat	...	...	...	1	13	—	—
Vegetables	...	...	...	—	18	—	2
Fruit	...	...	...	1	9	3	21
Fish	...	...	...	—	—	3	23
Miscellaneous	...	...	...	—	15	3	22
Total				4	17	3	12

Table 67 *Various Condemned Foods, 1970*

				Tons	cwts.	qrs.	lbs.
Vegetables	...	...	...	14	4	3	17
Poultry	...	...	...	6	2	2	22
Ham	...	...	...	1	2	2	3½
Fruit	...	...	...	2	19	2	19
Wet fish	...	...	...	—	1	1	21
Frozen foods	...	...	...	1	17	3	3
Cured fish	...	...	...	—	4	2	19
Shell fish	...	...	...	—	—	—	6
Miscellaneous	...	...	...	4	17	3	4
Total	...	...	...	31	11	2	2½

Table 68 *Meat Inspection, Carcasses Inspected and Condemned, 1970*

	Cattle	Calves	Sheep	Pigs
Number killed in public abattoir	30,100	849	70,319	44,246
Number killed in private slaughterhouses	349	4	1,175	313
Total number of animals killed	30,449	853	2,931	352
Number of animals killed outside the city and exposed for sale in public abattoir	211	1	71,494	44,559
Number inspected	30,660	854	74,425	44,911
All diseases except Tuberculosis and Cysticerci—				
Whole carcasses condemned	20	18	234	55
Carcasses of which some part or organ was condemned	6,957	29	5,103	2,698
Percentage of number inspected affected with disease other than tuberculosis and cysticerci	22.75	5.50	7.17	6.13
Tuberculosis only—				
Whole carcasses condemned	—	—	—	—
Carcasses of which some part or organ was condemned	19	—	—	16
Percentage of number inspected affected with tuberculosis	0.06	—	—	0.03
Cysticercosis—				
Carcasses of which some part or organ was condemned	121	—	—	—
Carcasses submitted to treatment by refrigeration	121	—	—	—
Generalised and totally condemned	—	—	—	—

Table 69 *Meat Inspection. Whole Carcasses and Organs Condemned, 1970*

						Cattle	Calves	Sheep	Pigs
Actinobacillosis, generalised	...	...	...	...	...	1	—	—	—
Bruising, generalised	...	...	...	...	...	1	—	1	1
Carcinoma	...	...	...	...	...	2	—	—	—
Decomposition	...	...	...	...	...	—	—	—	3
Dysentery, calf	...	...	...	...	...	—	1	—	—
Erysipelas, acute swine	...	...	...	...	...	—	—	—	2
Emaciation, pathological	...	...	...	...	...	5	—	—	—
Immaturity	...	...	...	...	...	—	6	—	—
Jaundice	...	...	...	...	...	1	2	1	4
Moribund	...	...	...	...	...	—	—	16	4
Oedema, generalised	...	...	...	...	...	1	—	1	5
Parasitic emaciation and oedema	...	...	...	...	...	—	—	208	—
Peritonitis, acute septic	...	...	...	...	...	3	—	—	6
Pleurisy, acute septic	...	...	...	...	...	—	—	2	7
Poliarthritis, acute septic	...	...	...	...	...	—	7	—	—
Pneumonia, acute septic	...	...	...	...	...	1	—	1	—
Pyæmia	...	...	...	...	...	3	1	4	13
Septicaemia	...	...	...	...	...	2	—	—	7
Toxaemia	...	...	...	...	...	—	1	—	2
Uraemia	...	...	...	...	...	—	—	—	1
Totals						20	18	234	55

Table 70 *Meat Inspection. Partial Carcasses and Organs Condemned, 1970*

		Partial Carcase	Lungs	Heart	Stom-ach	Intes-tines	Liver	Pluck	Head	Udder
Inflammatory Conditions	Cattle	39	1,024	92	284	299	918	—	67	1,187
	Sheep	41	—	—	1,041	1,041	222	583	—	—
	Calves	—	—	—	—	—	—	16	—	—
	Pigs	20	—	—	1,004	1,004	—	1,571	183	—
Parasitic Conditions	Cattle	—	438	38	—	37	4,306	—	88	—
	Sheep	23	—	—	153	153	1,084	3,211	—	—
	Calves	—	—	—	—	—	—	—	—	—
	Pigs	—	—	—	481	481	—	1,076	—	—
Tuberculosis	Cattle	—	13	13	4	4	2	—	15	—
	Sheep	—	—	—	—	—	—	—	—	—
	Calves	—	—	—	—	—	—	—	—	—
	Pigs	—	—	—	16	16	—	18	11	—
Miscellaneous	Cattle	5	156	46	51	60	150	—	9	124
	Sheep	2	—	—	89	89	24	63	—	—
	Calves	—	—	—	—	—	—	2	—	—
	Pigs	18	—	—	36	36	—	98	16	—

Table 71 *Total Weight of Meat Condemned, 1970*

Home killed—								lbs.
Beef:	whole carcasses	...	...	...	...	...	...	7,742
	part ,,	...	..	...	...	...	...	2,189
Mutton:	whole carcasses	..	..	...	...	...	...	9,680
	part ,,	...	...	...	...	...	...	659
Veal:	whole carcasses	...	...	..	...	...	...	647
	part ,,	.	...	..	...	...	...	11
Pork:	whole carcasses	...	..	...	...	...	...	6,157
	part ,,	...	...	...	...	...	...	1,268
								<hr/>
Total							...	28,353
Imported Meat and Meat Products—								
Beef	...	...	...	.	...	...	...	1,114
Mutton and lamb	...	...	...	...	...	...	...	322
Liver	...	...	...	...	...	...	...	74
Kidney	...	...	...	...	...	...	...	20
Bacon	...	...	...	...	...	...	...	217
Turkey	...	...	...	...	...	...	...	144
Black puddings	...	...	...	...	...	...	...	51
Ham	...	...	...	...	...	...	...	34
Chicken	...	...	...	...	...	...	...	152
Sausage	...	...	...	...	...	...	...	154
								<hr/>
Total							...	2,282
Weight of Offals Condemned—								
Beef	...	..	...	...	...	...	...	122,584
Mutton	...	...	...	...	...	...	...	54,058
Veal	..	...	...	...	...	...	...	319
Pork	...	...	...	...	...	..	...	52,525
								<hr/>
Total							...	229,486

The total weight of meat condemned was 260,121 lbs.

